

ROTEL



Owner's manual

RSDX-02e

DVD Receiver



	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

	This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.
	This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.

APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT FULLY.
ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



Notice

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna. (TV, radio, etc.)
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for additional help.

Caution

This device complies with part 15 of the FCC Rules operation is subject to the following to conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Important Safety Instructions

DANGER: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

WARNING: There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read all the instructions before connecting or operating the component. Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the enclosure only with a dry cloth or a vacuum cleaner.

You must allow 10 cm or 4 inches of unobstructed clearance around the unit. Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation openings. If the unit is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel. (AC 110-240 V, 50/60 Hz)

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable. Do not defeat grounding and/or polarization provisions. The cable should be connected to a 2-pin polarized wall outlet, matching the wide blade of the plug to the wide slot of the receptacle. Do not use extension cords.

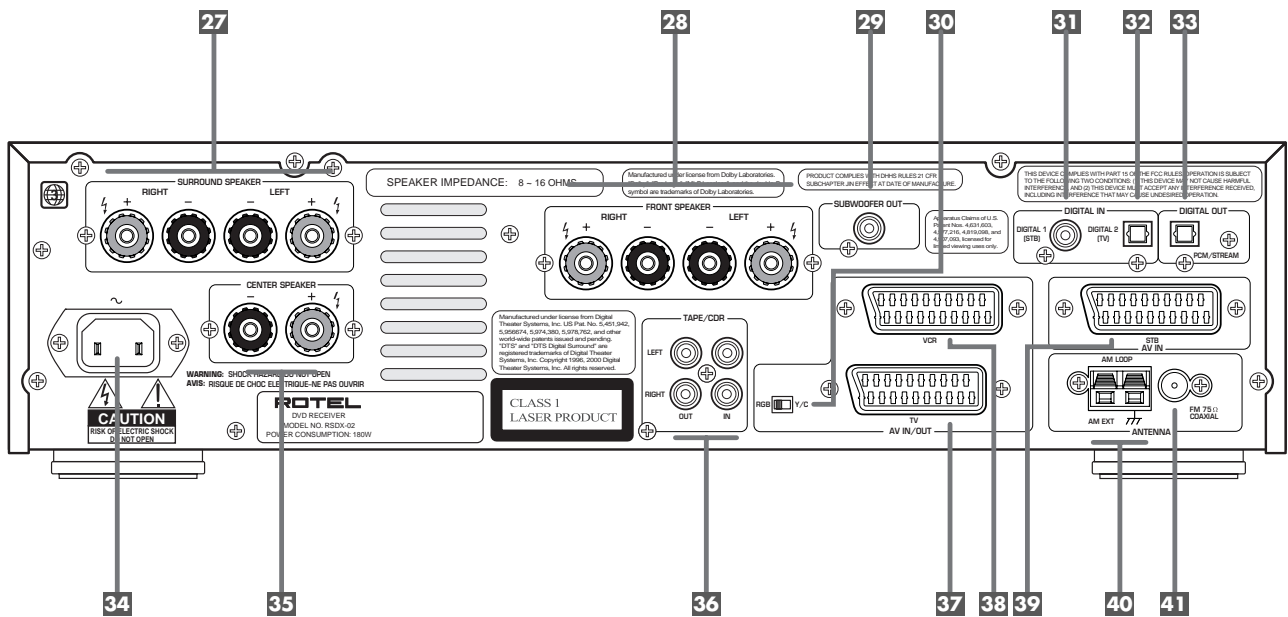
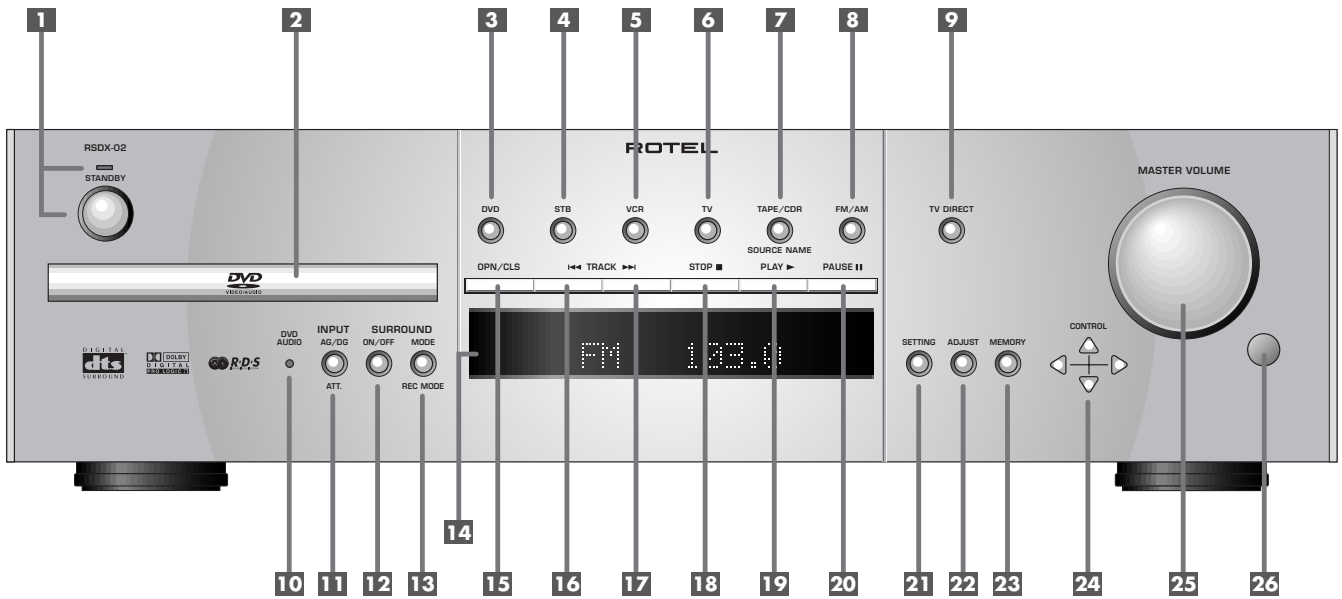
Do not route the power cord where it will be crushed, pinched, bent, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where it exits the back of the unit.

The power cord should be unplugged from the wall outlet during a lightning storm or if the unit is to be left unused for a long period of time.

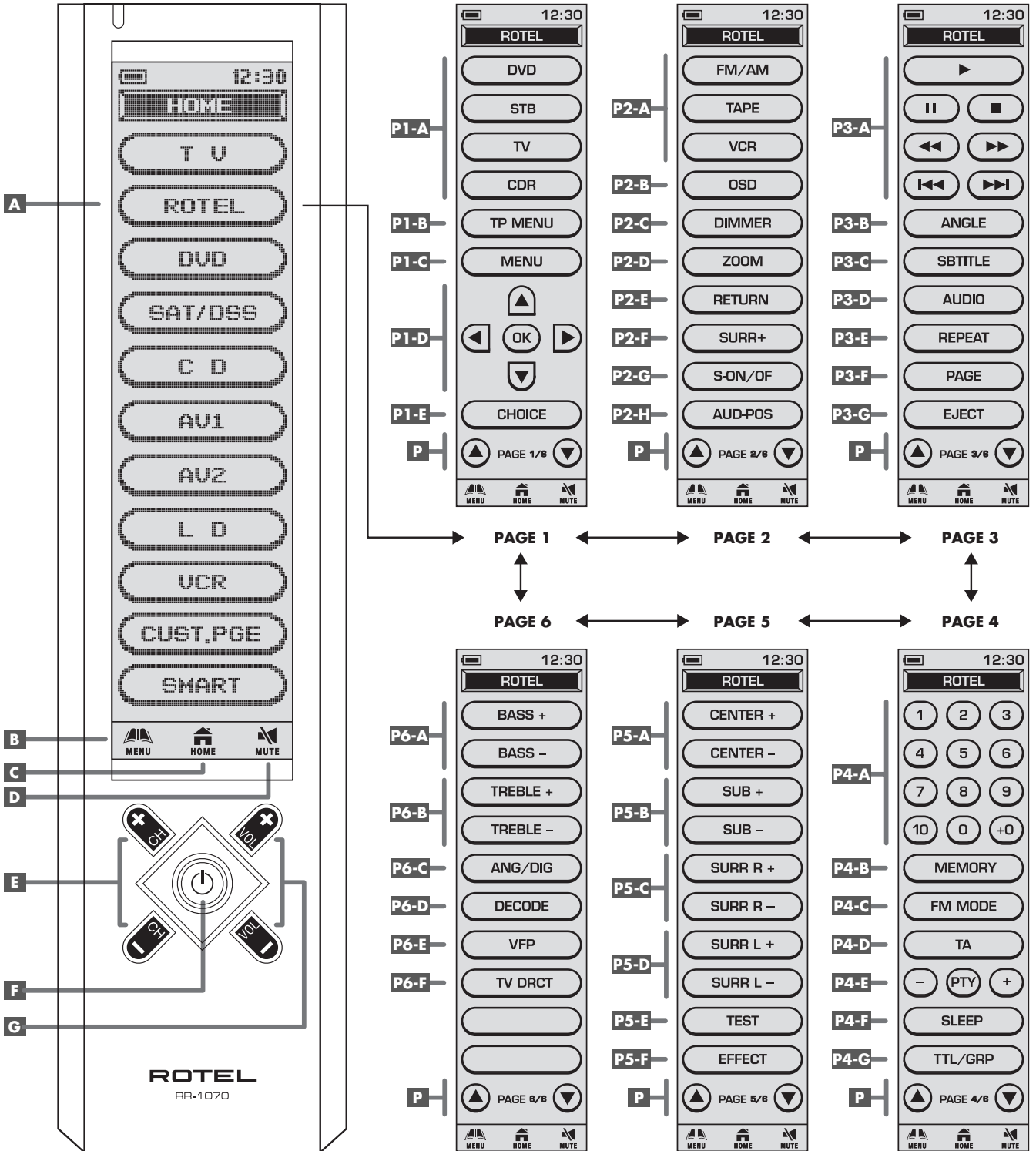
Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- The power supply cord or plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit shows signs of improper operation
- The unit has been dropped or damaged in any way

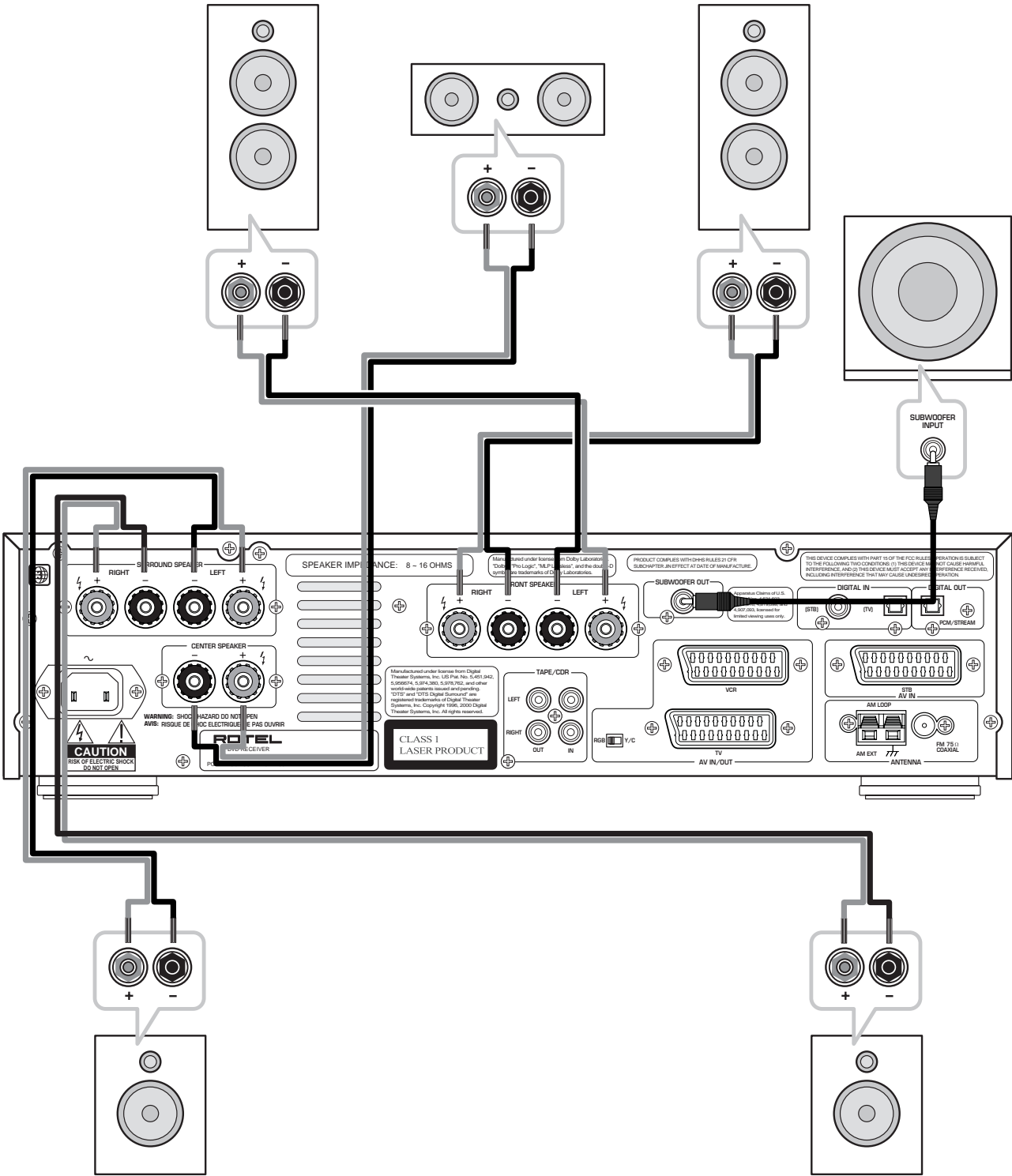
1: Controls and Connections



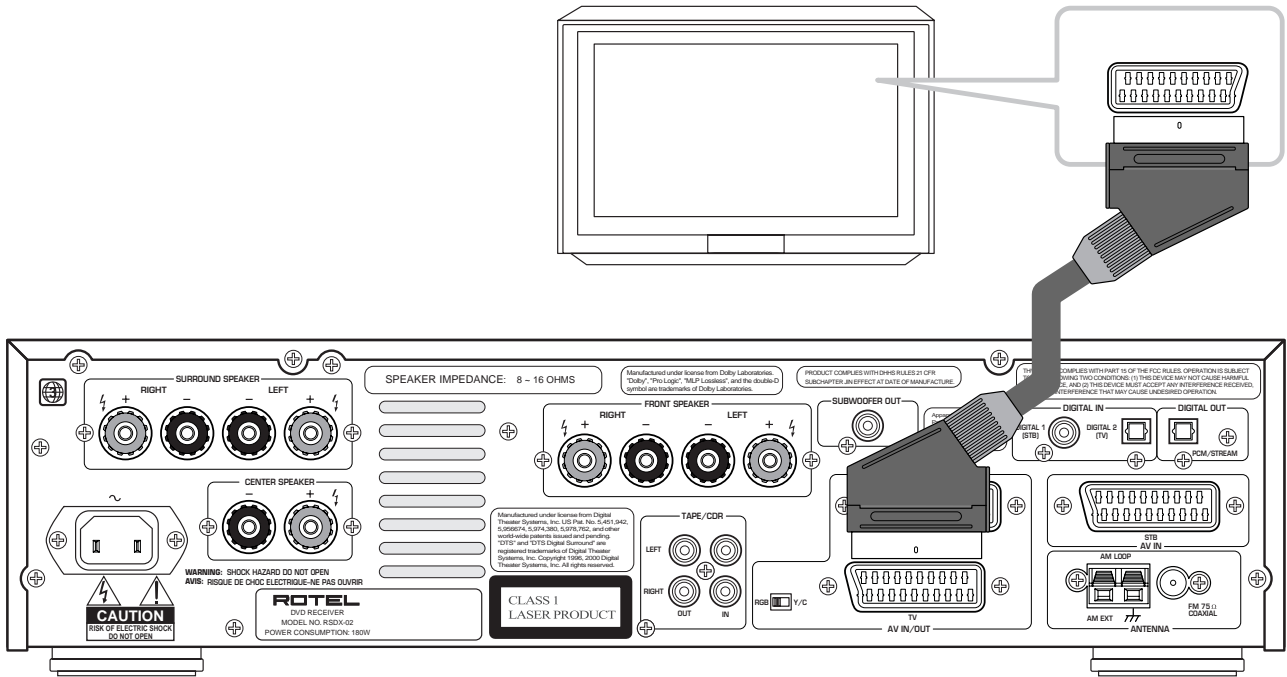
2: RR-1070 Remote Control



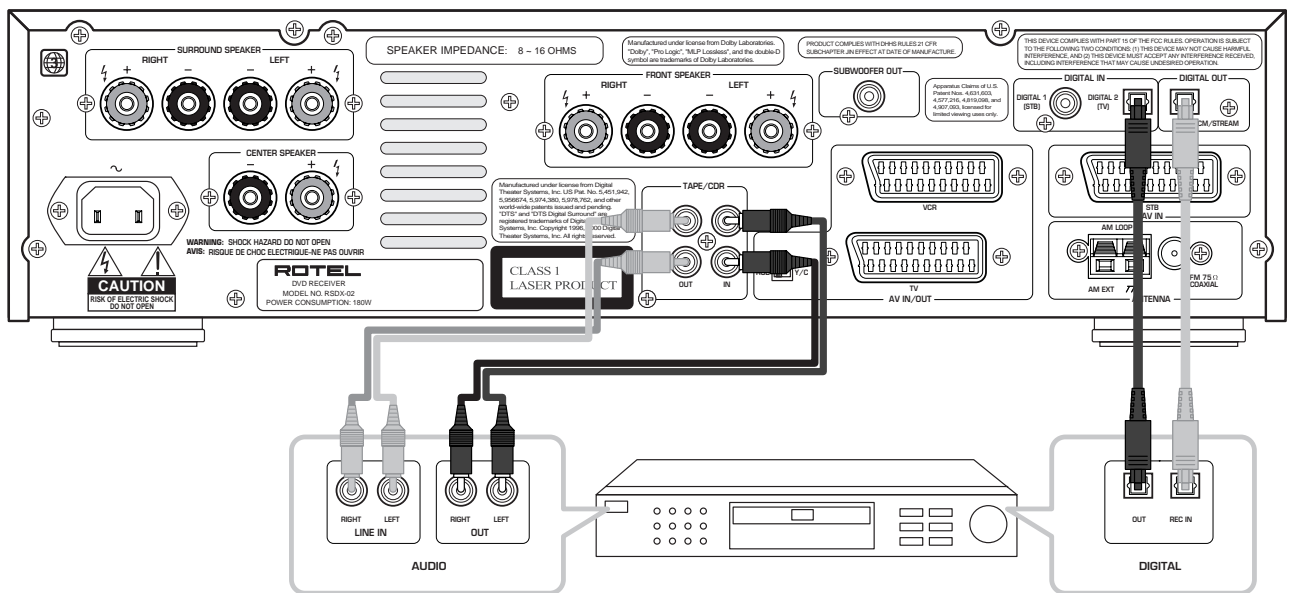
3: Connecting the Speakers



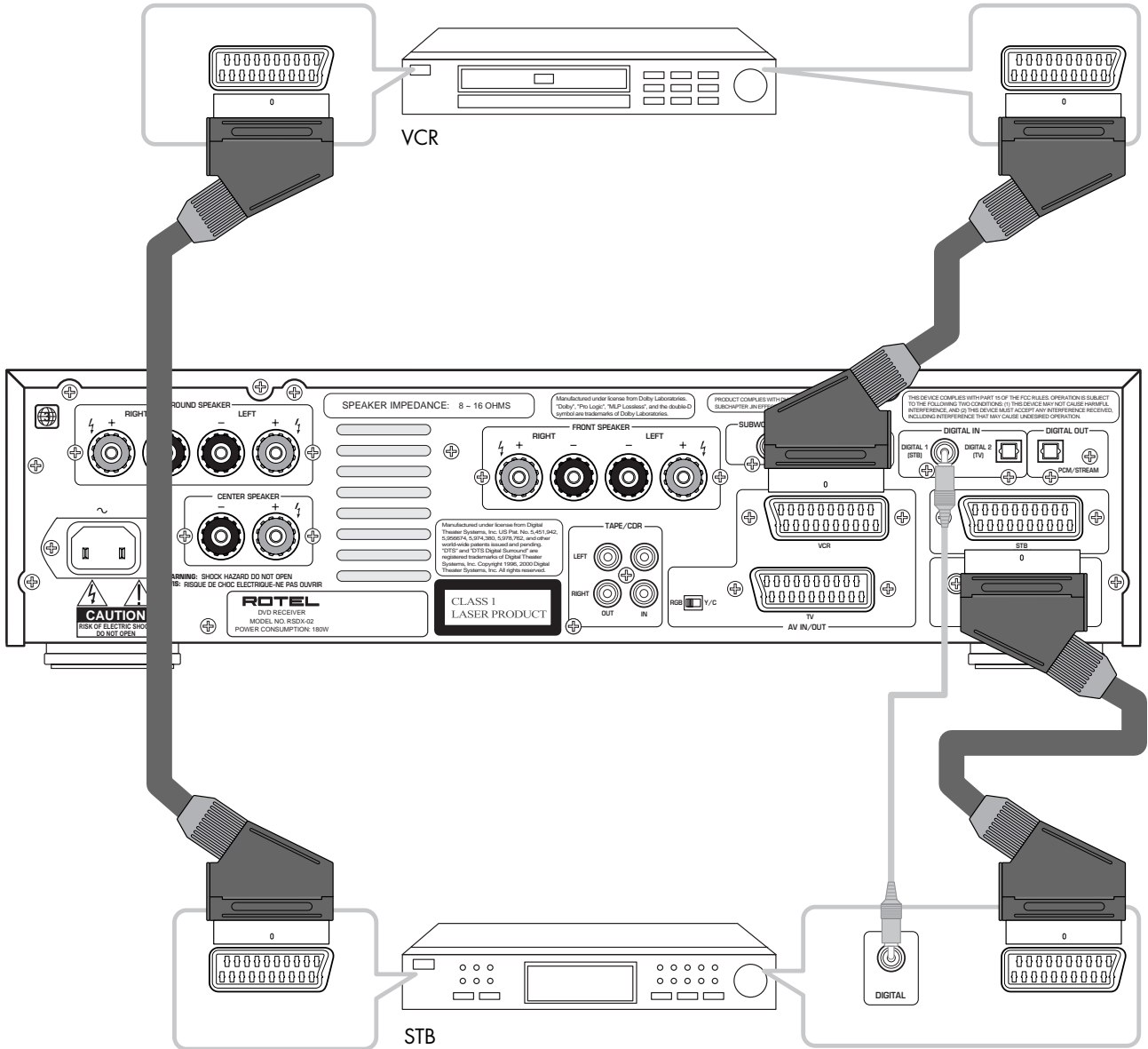
4: Connecting the TV



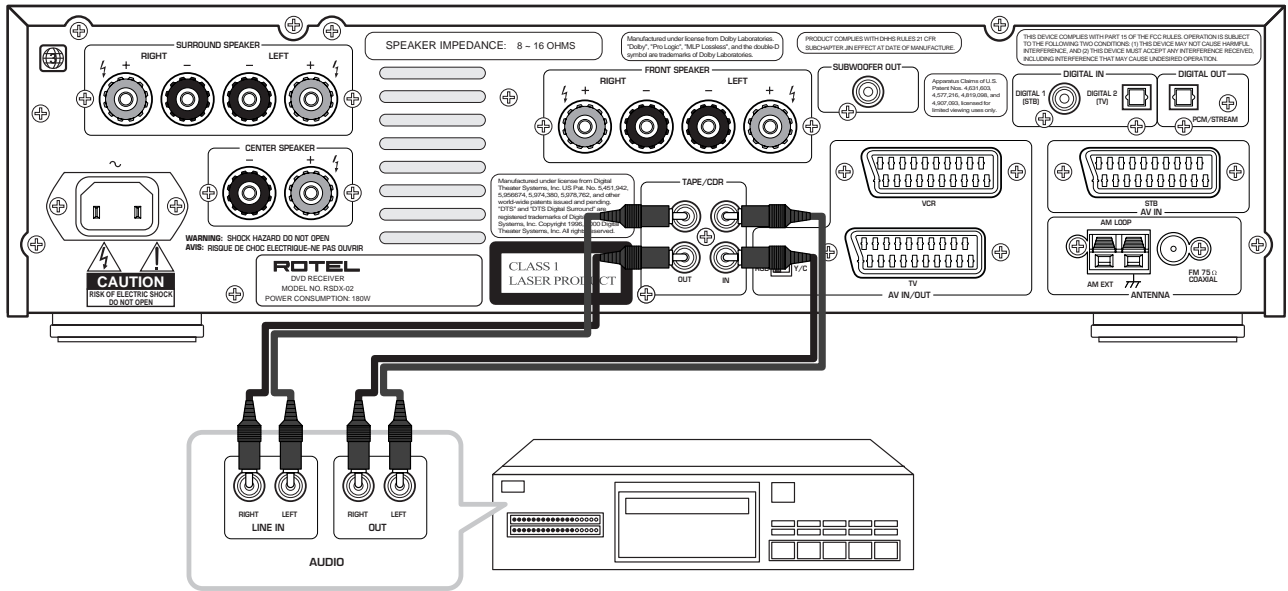
5: Connecting a CD Player/CDR Recorder



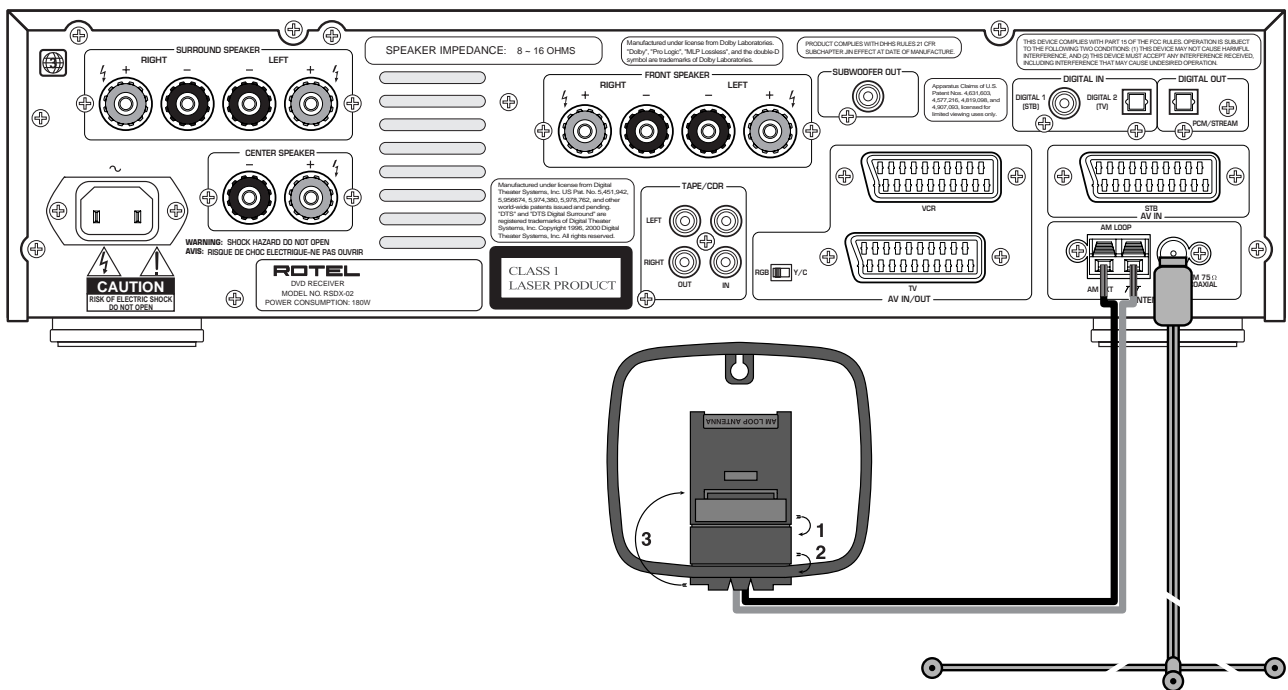
6: Connecting a VCR and STB receiver



7: Connecting an Analog Audio Tape Recorder



8: Connecting AM and FM antennae



9: Parental Lock Country Codes

AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	Azerbaijan
BA	Bosnia and Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Côte d'Ivoire
CK	Cook Islands
CL	Chile

CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands (Malvinas)
FM	Micronesia (Federated States of)
FO	Faroe Islands
FR	France
FX	France, Metropolitan
GA	Gabon
GB	United Kingdom
GD	Grenada
GE	Georgia
GF	French Guiana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe
GQ	Equatorial Guinea

GR	Greece
GS	South Georgia and the South Sandwich Islands
GT	Guatemala
GU	Guam
GW	Guinea-Bissau
GY	Guyana
HK	Hong Kong
HM	Heard Island and McDonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran (Islamic Republic of)
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia
KI	Kiribati
KM	Comoros
KN	Saint Kitts and Nevis
KP	Korea, Democratic People's Republic of
KR	Korea, Republic of
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Lao People's Democratic Republic
LB	Lebanon
LC	Saint Lucia

LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libyan Arab Jamahiriya
MA	Morocco
MC	Monaco
MD	Moldova, Republic of
MG	Madagascar
MH	Marshall Islands
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama

PE	Peru
PF	French Polynesia
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and Miquelon
PN	Pitcairn
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Runion
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan Mayen
SK	Slovakia
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Sao Tome and Principe
SV	El Salvador
SY	Syrian Arab Republic
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand

TJ	Tajikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan, Province of China
TZ	Tanzania, United Republic of
UA	Ukraine
UG	Uganda
UM	United States Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State (Holy See)
VC	Saint Vincent and the Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (U.S.)
VN	Vietnam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

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About Rotel

A family whose passionate interest in music led them to manufacture high fidelity components of uncompromising quality founded Rotel 40 years ago. Through the years that passion has remained undiminished and the family goal of providing exceptional value for audiophiles and music lovers regardless of their budget, is shared by all Rotel employees.

The engineers work as a close team, listening to, and fine tuning each new product until it reaches their exacting musical standards. They are free to choose components from around the world in order to make that product the best they can. You are likely to find capacitors from the United Kingdom and Germany, semi conductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

Rotel's reputation for excellence has been earned through hundreds of good reviews and awards from the most respected reviewers in the industry, who listen to music every day. Their comments keep the company true to its goal – the pursuit of equipment that is musical, reliable and affordable.

All of us at Rotel, thank you for buying this product and hope it will bring you many years of enjoyment.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.

Manufactured under license from Digital Theater System, Inc. US Pat. No. 5,451,942 and other world-wide patents issued and pending. "DTS", "DTS Digital Surround", are trademarks of Digital Theater Systems, Inc."

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Getting Started

Thank you for purchasing the Rotel RSDX-02e DVD Receiver. With its precision transport, comprehensive digital processing, and Rotel's Balanced Design, the RSDX-02e ensures the highest level of audio performance. When used in a high-quality audio system, your DVD receiver will provide years of enjoyment.

The RSDX-02e is a multipurpose receiver consisting of four components in one:

- DVD Player
- AM/FM Tuner with RDS capability
- Digital Surround Sound Processor
- 5-Channel Amplifier

Video Features

- DVD formats include DVD-Audio, DVD-Video, Audio CD, Video CD, SVCD, MP3, and JPEG
- Special playback functions such as frame-by-frame, zoom, and variable slow-motion and high-speed play.
- DVD-Video features include Multi-angle, Multi-language subtitles, and Multi-language audio.
- SCART connectors for composite video, S-Video, and RGB video

Audio Features

- Supported audio formats include sampling frequencies up to 192 kHz, linear PCM encoding, up to 24-bit resolution, and MLP. DVD-Audio supports up to 6 channels at sample rates of 48, 96, or 192 kHz and sample sizes of 16, 20, or 24 bits. DVD Video supports 2 channels at sample rates of 48 and 96 kHz and sample sizes of 16, 20, or 24 bits. Audio CD/Video CD is limited to 2 channels, 44.1 kHz at 16 bits.
- Supports the following digital audio formats:
 - Dolby Digital®
 - DTS® (Digital Theater Systems)
 - DVD-Audio
 - MLP® (Meridian Lossless Packing)
 - MP3 (MPEG 1, Layer 3)
 - Linear PCM
- Two digital inputs plus digital output

Other Features

- User-friendly On-Screen Displays
- Full-featured touch-screen universal remote control
- Parental lock

Supplied Accessories

- RR-1070 Remote Control Unit, with NiMH Rechargeable batteries, AC/DC Adaptor and AC Cord (1)
- AM Antenna
- FM Antenna
- Instruction manual (1)
- AC Power Cord (1)

A Few Precautions

Please read this manual carefully. In addition to installation and operating instructions, it will help you get optimum performance from your new DVD player. Please contact your authorized Rotel retailer for answers to any questions you might have. In addition, all of us at Rotel welcome your questions and comments.

Save the RSDX-02e shipping carton and all enclosed packing material for future use. Shipping or moving the RSDX-02e in anything other than the original packing material may result in damage that is not covered by the warranty.

Placement

Use common sense when placing the RSDX-02e in a cabinet or when stacking other equipment. Make sure that the shelf or cabinet can support its weight. Do not stack heavy components on top of the RSDX-02e. Avoid placing the unit where it may be subject to excessive heat such as on top of a large power amplifier or near a heat register. For best performance, avoid placing the unit where it may be subject to vibration, such as near a speaker.

CONNECTIONS

Although, the RSDX-02's rear panel looks daunting, connecting the unit to your system is straightforward.

There are connections for each of the five speakers in a 5.1 channel surround system. In addition, a subwoofer output is provided for connecting an optional powered subwoofer.

Each of the video source components (VCR, TV set-top box etc.) is connected to the RSDX-02e inputs with a SCART cable carrying all of the video and analog audio signals and an optional digital audio cable (coax or optical).

The video signal from the RSDX-02e is sent to the TV monitor using a SCART cable that carries analog audio and video signals (composite, S-Video, and RGB).

An analog tape deck, CD player, or CD recorder is connected with standard RCA analog audio cables and/or digital audio cables (coax or optical).

The supplied AM and FM antennae are connected to the antenna inputs.

Finally, the AC power cord is plugged into the back panel of the RSDX-02e and then into an AC wall outlet.

Notes on connections

There are many ways to configure and hook-up a surround sound audio system. It is not possible to cover every configuration in this manual; therefore, we describe the typical connections that will work well in a majority of situations.

The following topics cover a variety of issues that you might consider when deciding how to configure your system.

NOTE: Do **not** plug any system component into an AC source until all connections have been properly made.

Cable selection

Use standard audio cables with RCA connectors for analog audio connections. Use the following color code:

Left channel audio: white
Right channel audio: red

Standard SCART cables carry analog audio signals from all video components.

Use standard optical digital cables for optical digital signals. Be sure to remove the protective covers from the back-panel jacks and/or from the ends of the cable. Use 75 ohm digital audio cables with an RCA connector on each end for coax digital audio.

Coax digital: orange

NOTE: You can substitute a 75 ohm video cable for a coax digital cable, but do not substitute conventional audio interconnect cables for digital signals.

When making signal connections, follow the color codes carefully at both ends of each cable.

Video Connections

There are SCART connections for two video components (VCR and STB set-top tuner) plus a SCART connector to connect the RSDX-02e to the TV monitor.

In addition to left/right analog audio signals, these SCART connectors can carry three types of video signals composite video (good quality), S-Video (better quality), and RGB video (best quality) as follows:

Output to TV: composite, S-Video, RGB
Input from TV: composite video only

Output to VCR: composite video only
Input from VCR: composite, S-Video, RGB

Input from STB: composite, S-Video, RGB

The RSDX-02e cannot convert one type of video to another; therefore, if you use one type of video signal for a source component, you must also use the same type of connection to the TV set.

To simply system configuration, determine which type of video connection is available on **all** of your source components and then use that type for **every** connection. For example, if your VCR, cable box, and TV all use composite video signals, simplify your system by using composite video connections everywhere.

NOTE: You must select either RGB or Y-C (S-Video), but not both for the output to the TV monitor using a back panel switch. Also, you may need to configure your TV monitor to accept the appropriate type of signal.

Digital Audio

Surround sound formats like Dolby Digital, DTS, LPCM, and MP3 are digital recordings. The RSDX-02e can only decode them when a digital input signal is available from the source component. A digital signal is automatically available from the built-in DVD player so that you can enjoy 5.1 channel sound from Dolby Digital and DTS encoded discs. In addition, the RSDX-02e provides connections for digital signals from two more components, one using a digital coax cable and one using an optical digital cable.

These digital inputs should be used for any other components that can deliver a Dolby Digital signal, such as HDTV receivers, DSB satellite receivers, or digital cable boxes. You might also use a digital connection for a CD player/recorder.

The RSDX-02e has an optical digital output to send the digital signal from any of the digital inputs to a digital recorder. When a digital input source signal is selected for listening, that signal is automatically sent to the optical digital output for recording.

NOTE: When using digital connections, you may also want to make the corresponding analog audio input connections.

Making Connections

Connecting Speakers 27 28 35

See Figure 3

The RSDX-02e has built-in amplifiers to power all five speakers in a 5.1 surround sound audio system: right/left front speakers, center channel speaker, and right/left surround speakers. There are five pairs of binding post connections (one pair for each speaker) which accept bare wire, spade lugs, or banana plug connectors (in some markets).

NOTE: Speakers should have an impedance of 8 ohms or higher.

Each pair of connectors is color-coded for polarity: red for positive and black for negative. Speakers and speaker wire are also marked for polarity. For proper performance, you must observe this polarity at all speaker connections. Always connect the positive terminal of each speaker to the red speaker terminal on the RSDX-02e and the negative speaker terminal to the corresponding black connector on the RSDX-02e.

Route the wires from the RSDX-02e to the speakers. Leave enough slack so you can move the components to allow access to the speaker connectors. If you are using banana plugs, connect them to the wires and then plug into the backs of the binding posts. The collars of the binding posts should be screwed in all the way (clockwise). If you are using terminal lugs, connect them to the wires. If you are attaching bare wires directly to the binding posts, separate the wire conductors and strip back the insulation from the end of each conductor. Be careful not to cut into the wire strands. Unscrew the binding post collars. Place the connector lug around the binding post shaft or the bare wire through the hole in the binding post. Turn the collar clockwise to clamp the connector lug or wire firmly in place.

1. Connect the front right speaker to binding posts labeled FRONT SPEAKER RIGHT.
2. Connect the front left speaker to binding posts labeled FRONT SPEAKER LEFT.
3. Connect the center channel speaker to binding posts labeled CENTER SPEAKER.
4. Connect the surround right speaker to binding posts labeled SURROUND SPEAKER RIGHT.
5. Connect the surround left speaker to binding posts labeled SURROUND SPEAKER LEFT.

NOTE: Be sure that no loose wire strands can touch adjacent wires or connectors.

After you have connected the speakers, you need to configure the RSDX-02e for the size and style of speakers in your system and calibrate the relative volume levels of the speakers using the built-in test tones. See the Setup section of this manual.

Connecting a Subwoofer 29

See Figure 3

To hook up a powered subwoofer, connect a standard RCA audio cable from the SUBWOOFER OUT jack on the back panel of the RSDX-02e to the RCA input on the subwoofer's power amp.

After you have connected the subwoofer, you need to configure the RSDX-02e to use the subwoofer and calibrate the relative volume level of the subwoofer using the built-in test tones. See the Setup section of this manual.

Connecting the TV Monitor 37

See Figure 4

Connect the RSDX-02e to your TV set with a SCART cable.

Select the appropriate input and video format on the TV to view the picture from the RSDX-02e.

NOTE: Unless you intend to use a composite video input on the TV, you must configure the RSDX-02e for operation with either an RGB or Y-C video signal. See the following section.

Setting the RGB/Y-C Switch 30

See Figure 1

The RSDX-02e can output three different types of video signals to the TV monitor: composite, Y-C (S-Video), and RGB. You must set the back-panel switch on the RSDX-02e to the correct position for the desired type of video signal. Put the switch in the RGB (left) position for use with RGB or composite video inputs on the TV. Put the switch in the Y-C (right) position for use Y-C inputs on the TV.

NOTE: Do not change the switch when the RSDX-02e is turned on. The unit must be unplugged, or in standby mode before the change will take effect.

Connecting an STB Set-top Box 31 32 39

See Figure 6

This section describes the hook-up of advanced HDTV set-top boxes, digital/HDTV cable boxes, and STB satellite receivers.

Connect the output of the STB receiver to the STB connector 39 on the RSDX-02e with a SCART cable. This cable can carry composite, S-Video, or RGB video signals as well as left/right stereo analog audio signals.

Digital Audio connection:

If your set-top box has a digital audio output, you should connect it to the RSDX-02e for playback of Dolby Digital or other digital broadcasts.

1. If the set-top box has a coax digital output, connect it to the DIGITAL 1 (STB) input 31 on the RSDX-02e using a coax digital cable. The RSDX-02e is pre-configured to use this digital input for the set-top box.
2. If the set-top box only has an optical digital output, connect it to the DIGITAL 2 (TV) input 32 on the RSDX-02e using an optical digital cable. The RSDX-02e will need to be reconfigured to associate this input with the set-top box input. See the Setup section of this manual.

VCR or Digital Video Recorder

31 32 33 33

See Figure 6

This section describes the hook-up of hi-fi VCRs with audio and video outputs. VCRs connected with RF antenna cables are connected directly to the TV, not to the RSDX-02e.

Output connections:

Connect the output of the VCR to the VCR connector 33 on the RSDX-02e with a SCART cable. This cable can carry composite, S-Video, or RGB video signals as well as left/right stereo analog audio signals.

Input connections:

To record composite video signals from the RSDX-02e on your VCR, no additional connections are required. However, to record Y-C (S-Video) or RGB video signals from an STB receiver, you must connect a second SCART cable from the output of the STB receiver directly to the input of the VCR.

Digital Audio connection (for digital video recorders):

If your video recorder has a digital audio output, you should connect it to the RSDX-02e for playback of Dolby Digital recordings.

1. If the video recorder has a coax digital output, connect it to the DIGITAL 1 (STB) input 31 on the RSDX-02e using a coax digital cable. The RSDX-02e will need to be reconfigured to associate this input with the VCR input. See the *Setup* section of this manual.
2. If the video recorder has an optical digital output, connect it to the DIGITAL 2 (TV) input 32 on the RSDX-02e using an optical digital cable. The RSDX-02e will need to be reconfigured to associate this input with the VCR input. See the *Setup* section of this manual.
3. Connect the DIGITAL OUT connector 33 on the RSDX-02e to the digital input on the video recorder with an optical digital cable.

CD Player/CDR Recorder

See Figure 5

Audio Connections:

1. Connect the left and right analog audio outputs from a CD/CDR to the LEFT/RIGHT AUDIO TAPE/CDR IN jacks 33 on the RSDX-02e with a standard RCA stereo audio cable.
2. With a CDR recorder, connect the LEFT/RIGHT AUDIO TAPE/CDR OUT jacks 36 to the audio inputs on the CDR.

Digital Audio connections:

If your CD/CDR has digital audio connections, you should connect them to the RSDX-02e.

1. If the CD/CDR has a coax digital output, connect it to the DIGITAL 1 (STB) input 31 on the RSDX-02e using a coax digital cable. The RSDX-02e will need to be reconfigured to associate this input with the TAPE/CDR input. See the *Setup* section of this manual.
2. If the CD/CDR has an optical digital output, connect it to the DIGITAL 2 (TV) input 32 on the RSDX-02e using an optical digital cable. The RSDX-02e will need to be reconfigured to associate this input with the TAPE/CDR input. See the *Setup* section of this manual.
3. When using a CDR recorder, connect the DIGITAL OUT connector 33 on the RSDX-02e to the digital input on the CDR with an optical digital cable.

NOTE: No video connections are required for an CD player/CDR recorder.

Audio Tape Recorder

See Figure 7

Audio Connections:

1. Connect the left and right analog audio outputs from the audio recorder to the LEFT/RIGHT AUDIO TAPE/CDR IN jacks 33 on the RSDX-02e with a standard RCA stereo audio cable.
2. Connect the LEFT/RIGHT AUDIO TAPE/CDR OUT jacks 36 to the audio inputs on the tape recorder.

NOTE: No video or digital connections are required for an audio tape recorder.

AM Antenna 40

See Figure 8

The RSDX-02e includes a plastic loop antenna to receive AM radio signals. Remove this antenna from the box and locate it near the RSDX-02e. It can be tacked to a wall, using the mounting tab provided. Alternatively, you can fold the center portion of the antenna to form a tabletop stand.

Connect the 300 ohm twin-conductor wire from the loop antenna to the push terminals labeled AM LOOP, attaching one wire to each terminal. It does not matter which wire attaches to which terminal, but make sure that the connections are solid and that the two wires do not touch.

You may need to rotate or otherwise reorient the antenna to find the best position.

NOTE: To use an outdoor antenna, connect its 300 ohm twin-conductor wire to the terminals in place of the loop antenna.

FM Antenna 41

See Figure 9

The RSDX-02e is supplied with a T-shaped indoor FM antenna. Connect the coax F-type plug to the FM antenna connector on the RSDX-02e. For best reception, unfold the T-shaped antenna. Eyelets at both ends of the T allow tacking the antenna to a wall, if desired. Experiment with positioning for best reception.

NOTE: To use an outdoor antenna, connect its 75 ohm coax lead wire to the FM connector instead of the indoor wire antenna, only after a professional contractor has installed the antenna system in accordance with local electrical codes.

AC Input 34

Your RSDX-02e is configured at the factory for the proper AC line voltage in the country where you purchased it (USA: 115 volts/60Hz AC or CE: 230 volts /50 Hz AC). The AC line configuration is noted on a decal on the back of your unit.

Plug the supplied cord into the AC INPUT receptacle on the back of the unit. Then, plug the power cord into an AC wall outlet.

NOTE: Memorized settings and video labels are preserved indefinitely, even if the RSDX-02e is disconnected from AC power.

OPERATING THE RSDX-02e

Considering its large number of features, the RSDX-02e is easy to operate.

The RSDX-02e can be operated from the front panel or the remote control. Front panel controls are simple to use, with just a few buttons, some of which guide you through menu options. The remote control provides more complete control options.

This section of the manual starts with explaining the basic layout and function of the front panel and the remote control. Then, we explain the basic operations such as turning the unit on and off, adjusting volume, selecting a source for listening, etc. Following this are sections covering the operation of the built-in DVD player and AM/FM tuner.

Throughout this manual, numbers in gray boxes refer to the RSDX-02e illustration at the front of this manual. Letters refer to the RR-1070 remote illustration. When both appear, the function is found on both the RSDX-02e and the remote. When only one appears, that function is found only on the RSDX-02e or the remote.

Front Panel Overview

The following is a brief overview of the control and features on the front panel of the RSDX-02e. Details concerning the use of these controls are provided in subsequent sections of this manual describing various tasks.

STANDBY Button **1**

The front panel STANDBY button works as a power switch, activating the unit (ON) or putting it into a standby mode (OFF).

DVD Drawer **2**

A slide-out drawer for inserting DVDs.

Input Buttons **3 4 5 6 7 8**

Press any of the six buttons to select and source for listening/viewing: DVD, STB, VCR, TV, TAPE/CDR, or AM/FM.

NOTE: The TAPE/CDR button is also used when programming a custom name for an input source.

VOLUME Control **25**

The large knob at the right side of the front panel is the master VOLUME control, adjusting the output level of all channels simultaneously.

DVD Audio LED **10**

An LED indicator lights when a DVD Audio disc is playing.

INPUT AG/DG Button **11**

Selects either the digital input or the analog audio input for the currently selected source. Normally, this button can be left in the default DIGITAL AUTO mode which will use the digital input, switching only to the analog input if no digital signal is present.

NOTE: The INPUT AG/DG button is also used to reduce the input level for an analog input to match the other input levels or reduce distortion.

SURROUND ON/OFF Button **12**

Selects either 2-channel STEREO mode or multi-channel SURROUND MODE for the currently selected source.

NOTE: The surround mode is memorized independently for each INPUT button.

SURROUND MODE Button **13**

Sets the desired multi-channel surround mode for 2-channel stereo inputs. Surround modes for multichannel inputs (such as Dolby Digital 5.1 and DTS 5.1) are generally activated automatically.

NOTE: The SURROUND MODE button is also used to activate a special record mode which allows recording a 2-channel downmix from multi-channel digital inputs.

LCD Display **14**

In the center of the front panel is an LCD display. The display provides status information while operating the unit.

DVD Transport Buttons **15 16 17 18 19 20**

Six rectangular buttons provide standard transport controls for the DVD player: OPEN/CLOSE, TRACK UP/DOWN, STOP, PLAY, and PAUSE.

SETTING Button **21**

The SETTING button steps through various configuration options which should be set after initial installation of the RSDX-02e, including the number and size of the speakers, subwoofer settings, etc.

ADJUST button **22**

The ADJUST button steps through the available adjustments that can be made while using the RSDX-02e.

MEMORY Button **23**

Press the MEMORY button to store adjustments, settings, or memorized AM/FM presets.

CONTROL Buttons **24**

Four cursor buttons used in navigating settings and adjustments. Use the UP/DOWN buttons to scroll through lists of options. Use the LEFT/RIGHT buttons to change a setting.

For example, to tune a radio station while in FM mode, press the UP/DOWN buttons until the word TUNING appears in the display. Then, use the LEFT/RIGHT buttons to tune to a new station frequency.

Remote Sensor **26**

This sensor receives IR signals from the remote control. Do not block this sensor.

Remote Control Overview

See Figure 2

The RSDX-02e includes a full-function touch screen universal remote control that can operate the RSDX-02e and other audio/video components.

A separate manual gives detailed instructions on programming and using the RR-1070 to replace all of the remote controls in your system. The RR-1070 manual covers many extra features (such as custom labeling of remote buttons that appear in its LCD display). To avoid duplication, we provide only basic information about using the RR-1070 to operate the RSDX-02e in this manual.

NOTE: Some of the RSDX-02e functions appear on the front panel and the remote. Throughout this manual, letters in gray boxes refers to the labeled illustration of the remote at the front of this manual; numbers in gray boxes refer to the front panel illustration.

The remote control includes five hard buttons POWER, CHANNEL UP/DOWN, and VOLUME UP/DOWN. The other remote control commands are used by touching "virtual" buttons appearing on the large touch screen panel on the remote.

Programming the RR-1070 MENU Button **B**

See Figure 2

Before using the the RR-1070, you may need to program it to operate the RSDX-02e. Detailed programming instructions are contained in the separate remote control owner's manual. Or, follow these simple instructions:

1. Touch the MENU command at the bottom left of the touch-screen on the remote.
2. Touch the SETUP command on the touch screen.
3. Touch the BRAND NAME command on the touch screen.
4. Touch the ROTEL command on the screen.
5. Select and touch the RSDX-02 EURO command on the touch screen and wait a few seconds.
6. Touch the OK command on the touch screen and wait a few seconds.
7. Touch the HOME command at the bottom center of the touch screen.

Using the RR-1070 ROTEL Button **A**

See Figure 2

To use the RR-1070 remote with the RSDX-02e, press the ROTEL virtual button on the home page of the remote control. The touch screen display will change to the first of six pages of commands for the RSDX-02e. Each page is identified by the name ROTEL at the top.

If you do not see one of the Rotel touch screen pages, press the HOME virtual button on any page to return to the home page where you can press the ROTEL button.

NOTE: Some remote buttons have different functions for depending on the source input. Select the proper input (i.e. DVD or FM/AM) before using the command buttons.

Changing Pages PAGE Buttons **P**

See Figure 2

There are six pages of touch screen commands for the Rotel RSDX-02e. From any of these pages, press the up or down PAGE buttons at the bottom of the touch screen to move forward or back to the next page. Each page number is displayed between the two PAGE buttons, for example: PAGE 1/6 indicating the first of six available pages.

Throughout this manual, remote control commands that are available on any of these pages or on the remote's hard buttons are indicated with a single letter in a gray box, referring to the remote illustration (Figure 2) at the front of this manual. Commands which appear only on one of the six Rotel pages will be indicated with the page number followed by a letter, for example: **P3-B** indicating a command on Page 3. Again these indicators appear on the remote illustration for easy reference.

POWER Button **F**

The POWER hard button on the remote provides the same function as the STANDBY button on the front panel. Press the button once to activate the unit; press again to put the unit into standby mode.

VOLUME Buttons **G**

Two hard buttons on the remote (VOL + and VOL -) control the master VOLUME, adjusting the output level of all channels.

CHANNEL Buttons **E**

Two hard buttons on the remote control, labeled CH + and CH -, are used when operating the RSDX-02's DVD player or AM/FM Tuner. In DVD mode, these buttons are used to select the next Track, backward or forward. In AM/FM mode, the buttons tune up or down.

HOME Button **C**

The HOME virtual button appears at the bottom of the touch-screen on every ROTEL or other device page. Press HOME to return to the main touch-screen page.

MUTE Button **D**

The MUTE virtual button also appears at the bottom of the touch-screen on every ROTEL page. Press the MUTE command to temporarily reduce the volume level to zero. Press the button again to restore the volume to the previous setting.

Basic Operations

This section covers the basic operating controls of the RSDX-02e and the remote.

Power On/Off **I G**

The RSDX-02e has a STANDBY button on the front panel and a POWER hard button on the remote. Press either button to turn the unit on. The front panel LCD display lights up.

Press either button again to turn the unit off. When turned off, the RSDX-02e remains in a low current standby mode. The LED above the STANDBY button the front panel lights when the unit is in standby mode.

NOTE: To completely power off the RSDX-02e when away from home for a long period of time, unplug the unit from the AC wall outlet.

The RSDX-02e also has a sleep function which turns the unit off after a specified amount of time (see the following topic). There is also an auto standby function that can automatically turn the unit off (only when using the DVD player) 30 or 60 minutes after the disc is stopped.

SLEEP Timer **P4-F**

The RSDX-02e sleep function turns the unit off automatically after a specified amount of time. Press the SLEEP command on page 4 of the remote to activate the sleep function. Each additional press of the button increases the length of time before the unit turns off.

- 1st press: 10 minutes
- 2nd press: 20 minutes
- 3rd press: 30 minutes
- 4th press: 60 minutes
- 5th press: 90 minutes
- 6th press: 120 minutes
- 7th press: 150 minutes
- 8th press: 0 minutes (sleep timer cancelled)

A SLEEP indicator and with the amount of time is shown in the front panel display. The time remaining before the sleep timer turns the unit off can be displayed with a single button press.

Volume Adjustments **25** **G**

The listening volume of the RSDX-02e can be adjusted from the front panel or the remote.

Front Panel: Rotate the front panel VOLUME control clockwise to increase the volume, counterclockwise to decrease.

Remote: Press the VOL UP hard button to increase the volume; press the VOL DOWN hard button to decrease.

When you adjust the volume, the setting is shown on the front panel display.

Muting the Sound **D**

The volume of the RSDX-02e can be temporarily turned off or muted. Push the MUTE command on the remote once to mute the sound. The word MUTING appears in the front panel display. Press the MUTE command again to restore previous volume levels.

NOTE: Adjusting the VOLUME controls on either the front panel or the remote also restores the volume when the RSDX-02e is muted.

Changing Display Brightness **P2-C**

There are two brightness settings for the front panel display. Press the DIMMER command on Page 2 of the remote to toggle between the bright and dim display settings.

Selecting Source Inputs

Up to six source components, including the built-in DVD player and FM/AM tuner, can be selected for listening and/or viewing with the RSDX-02e. Selecting a source input can be done from the front panel or the remote control.

Selecting an Input from the Front Panel **3 4 5 6 7 8**

To select an input source from the front panel, press any of the six input selector buttons. The name of the selected input appears in the front panel display.

NOTE: When the TAPE/CDR button is pressed, either TAPE or CDR appears in the front panel, depending on which name is assigned to the input. See Changing Input Name below.

Selecting an Input from the Remote **P1-A P2-A**

To select an input from the remote control, push any of the input source commands on Page 1 or Page 2.

Four of the inputs (DVD, STB, TV, CDR) are available on Page 1 of the remote screens. An additional three inputs (FM/AM, TAPE, VCR) are available on Page 2.

The name of the selected source appears in the front panel display.

NOTE: Either the TAPE or the CDR input is available depending on which name has been assigned to the input. See Changing Input Name below.

Changing Input Name **7**

The TAPE/CDR inputs can be used for a CDR (compact disc recorder) or TAPE (analog tape recorder). The correct name (TAPE or CDR) should be correctly assigned to these inputs so that the name appears in the display, so that the INPUT buttons on the remote work as expected, and so that digital inputs are available for use with a CDR. As delivered from the factory, the RSDX-02e has the TAPE name assigned to these inputs. To change the input name to CDR:

1. Select the TAPE/CDR inputs by pressing the TAPE/CDR input button.
2. Press and hold the TAPE/CDR button until the words ASSIGN. CDR appear in the front panel display.

To change the input name back to TAPE, repeat Step 2, holding the button until ASSIGN. TAPE appears in the display.

Selecting Digital or Analog Inputs **11 P6-C**

A digital source component can be connected to the RSDX-02e using either for digital or analog cables, allowing the selection of the digital or analog signal for an input. There are two available modes:

DIGITAL AUTO: The selection of digital or analog inputs is automatic. If a digital signal is available for the selected input, the RSDX-02e uses it. If a digital signal is not available, the RSDX-02e will use the analog signal.

ANALOG: The RSDX-02e uses the analog signal, even if a digital signal is available.

By default, all of the inputs (except the DVD input) are set at the factory for the ANALOG mode. To change the mode:

1. Select the desired input by pressing an INPUT select button on the front panel or remote.
2. Press the INPUT AG/DG button on the front panel or ANG/DIG command on Page 6 of the remote control to change the mode. The selected mode, either ANALOG or DGTL AUTO is shown in the front panel display.

NOTE: The built-in DVD input always uses digital signals and cannot be changed. This setting is memorized independently for all other digital inputs.

Selecting the Digital Signal **11 24 P6-D**

When the DIGITAL AUTO mode is selected and a digital signal is detected, one of four indicators appears in the display, depending on the type of digital signal being received:

DOLBY DIGITAL: Dolby Digital signal is being received.

DTS: DTS signal is being received.

LPCM: Linear PCM signal (such as a CD) is being received.

PPCM: DVD AUDIO Packed PCM digital signal is being received.

In almost all cases, the correct type of digital signal is detected and decoded automatically in DIGITAL AUTO mode. However, when using the DVD input, you can manually force the RSDX-02e into either Dolby Digital or DTS modes if necessary.

From the front panel:

1. While using the DVD input, press the front panel INPUT AG/DG button or ANG/DIG command on Page 6 of the remote to change the mode so that DGTL AUTO is shown in the front panel display.
2. While DGTL AUTO is displayed, press the CONTROL ◀/▶ buttons on the front panel to step through the three options: DGTL AUTO, DGTL D.D., and DGTL DTS.

From the remote:

Press the DECODE button (on Page 6) repeatedly to step through the options.

If you select a mode that does not match the incoming signal, the name of the digital mode in the display flashes.

NOTE: The selection of the Dolby Digital or DTS modes reverts automatically to DIGITAL AUTO mode when the unit is turned off or a different input is selected.

Attenuating Analog Inputs 

In some systems, the signal level of an analog input may be too high relative to other inputs or even high enough to cause distortion. To reduce the input level of an analog input:

1. Select the desired analog input.
2. Press and hold the AG/DG button (front panel only), to toggle between no attenuation (ATT NORMAL appears in the display) and attenuation on (ATT ON appears in the display).

NOTE: This setting must be made individually for each analog input and is memorized as a permanent setting.

TV DIRECT Mode  

The TV DIRECT feature allows bypassing the audio features of the RSDX-02e and send video signals directly to the TV set when you prefer to use the TV's built-in speakers. In the TV DIRECT mode, the RSDX-02e functions as a simple DVD player and video switcher. The amplifiers and all surround processing is bypassed. Signals from the DVD player, an STB receiver, or a VCR can be sent to the TV.

NOTE: TV Direct mode is only available for components connected with SCART cables.

To activate the TV Direct mode, press the TV DIRECT button on the front panel or on page 6 of the remote. Then, select a source input (DVD, STB, or VCR).

To cancel TV Direct mode and return to the normal operation of the RSDX-02e, press the TV DIRECT button again.

To cancel TV Direct mode and put the RSDX-02e in standby mode, press the STANDBY or POWER buttons on the front panel or remote.

NOTE: The TV Direct mode can be used with the Auto Power mode for automatic playback simply by turning on a video component. See the Comprehensive Setup section for details.

Record Mode 

Any analog input is available for recording at the CDR/TAPE or VCR analog outputs. However, these are 2-channel stereo outputs that cannot record a multi-channel digital source. The RSDX-02e has a special RECORD MODE that downmixes multichannel inputs, combining all of the channels into a 2-channel signal for recording.

To activate the RECORD MODE, press and hold the REC MODE button (front panel only), to toggle between RECORD MODE ON and RECORD MODE OFF (normal mode) as shown in the front panel display.

With RECORD MODE ON, only the front speakers are active and surround sound is disabled. None of the surround sound settings are available. In addition, RECORD MODE ON prevents the volume display, normally shown on the TV monitor, from being recorded by the VCR.

NOTE: This setting automatically reverts to the normal RECORD MODE OFF setting when a different source input is selected or when the RSDX-02e is turned off.

Surround Modes

To get the best performance from your RSDX-02e, it helps to understand the surround sound formats available today, to know which decoding process to use for a particular recording, and how to select it. This section provides basic background information about surround sound formats. The following sections provide detailed operating instructions for automatic and manual selection of surround modes.

**Dolby Surround
Dolby Pro Logic II**

The most widely available surround sound format for consumer audio/video is Dolby Surround®, available on nearly all commercial VHS tapes, many television broadcasts, and most DVDs. It is a matrix-encoding system that records front left, front center, front right, and a mono surround channel into a 2-channel stereo re-

coding. During playback, a Dolby Pro Logic® or Pro Logic II decoder extracts each channel and distributes it to the appropriate speakers.

Dolby Pro Logic II decoding should be used for any analog recording labeled "Dolby Surround" or any Dolby Digital 2.0 soundtrack. A "music mode" makes Pro Logic II an excellent choice for audio CDs.

Dolby Pro Logic Cinema or Music modes can be selected for ANY 2-channel recording, analog or digital.

Dolby Digital

Dolby Digital is the standard audio format for DVDs and for digital television broadcasting in the United States.

A Dolby Digital 2.0 soundtrack is a digital 2-channel recording of a matrix encoded Dolby Surround soundtrack. To play a Dolby Digital 2.0 recording, use Dolby Pro Logic II decoding as previously described.

A Dolby Digital 5.1 soundtrack has six discrete channels: front left, front center, front right, surround left, surround right, and a Low Frequency Effects (LFE) channel containing bass signals intended for a subwoofer.

Decoding of Dolby Digital 5.1 soundtracks is automatic.

NOTE: Many DVDs have a Dolby Digital 2.0 matrix soundtrack as the default. The Dolby Digital 5.1 soundtrack may have to be selected as an option from the setup menus at the beginning of the DVD.

DTS 5.1

DTS® (Digital Theater Systems) is an alternative digital format competing with Dolby Digital in both movie theaters and home theater markets. The basic functions of the DTS system are similar to those of Dolby Digital (for example, 5.1 discrete channels), however the technical details of the compression and decoding processes differ somewhat.

Like Dolby Digital, DTS can only be used on a digital recording and, therefore, is only available for home use on LaserDiscs, DVDs, or other digital formats.

Detection and proper decoding of DTS 5.1 signals is automatic.

NOTE: DVDs with a DTS soundtrack almost always have it configured as an option to the standard matrix Dolby Surround format. To use DTS, you may have to go to the setup menus at the beginning of the DVD and select "DTS 5.1" instead of "Dolby Surround" or "Dolby Digital 5.1".

All-Channel Stereo

All-Channel stereo sends a stereo signal to four-speaker or five-speaker systems.

All-Channel stereo can be selected for any stereo input, analog or digital. However, this option only available for systems with 4 or 6 speakers.

DSP

This mode digital processing to synthesize the ambience of four different concert venues (LIVE CLUB, DANCE CLUB, HALL, PAVILION) using only the front and rear speakers, but not the center channel speaker.

DSP modes can be selected for any stereo source input, analog or digital.

Surround Off

Turns off all surround sound processing for 2-channel stereo. Even if connected, the center channel and surround speakers are not used. If the system is configured to route bass signals from the front speakers to the subwoofer, this capability remains in effect.

Surround Off can be selected for ANY input source.

Manually Selecting Surround Modes

For users who prefer a more active role in setting surround modes, buttons on the remote and the front panel provide manual selection of surround modes that are not automatically detected or, in some cases, to override an automatic setting.

NOTE: These settings are memorized independently for each source input and will be used as a default setting each time that source is used.

Surround Sound On/Off **12** **P2-G**

Press the SURROUND ON/OFF button on the front panel or the S-ON/OFF button on Page 2 of the remote to switch between Surround Sound On mode and Surround Sound Off (2-ch stereo) mode.

Selecting a Surround Sound Mode **13** **P2-F**

When the Surround Sound is turned On (see above), use the SURROUND MODE button on the front panel or the SURR + button on Page 2 of the remote to select a surround mode for stereo sources. Each press of the button steps to the next available option:

PLII Movie: Dolby Pro Logic Movie

PLII Music: Dolby Pro Logic Music

LIVE CLUB: DSP mode for small music club

DANCE CLUB: DSP mode for larger club

LIVE HALL: DSP mode for large concert venue

PAVILION: DSP mode for large arena

ALL STEREO: Stereo signal sent to front and rear speakers.

NOTE: None of these settings are available for 2 speaker systems. PLII Movie and Music are the only settings available for 3-speaker systems.

Basic Tuner Controls

The RSDX-02e features a digital synthesized AM/FM tuner. The unit offers manual tuning, seek tuning, and preset station tuning (30 FM and 15 AM).

NOTE: Some of the buttons described in the following sections may have different functions for other source inputs. Be sure to select the FM/AM input on the RSDX-02e before using the tuner command buttons.

Selecting FM/AM **7** **P2-A**

Press the FM/AM button to select the AM/FM tuner input. The tuner will be tuned to the last station, AM or FM.

Press the FM/AM button to toggle between AM and FM reception. An indicator in the front-panel display confirms your choice and the currently tuned station frequency is shown.

Tuning from the Front Panel **24**

1. Repeatedly press the CONTROL ▲/▼ buttons until the word TUNING appears in the front panel.
2. Repeatedly press one of the CONTROL ◀/▶ buttons until the desired frequency appears in the display.
3. For seek tuning, press and hold one of the CONTROL buttons. When you release the button, the tuner will continue increasing or decreasing the frequency until the next available station is found.

Tuning from the Remote **E** **P3-A**

1. Repeatedly press the CH +/- hard buttons or the TRACK ◀◀ ▶▶ buttons on Page 3 of the remote until the desired frequency appears in the display.
2. For seek tuning, press and hold one of the CH +/- or TRACK ◀◀ ▶▶ buttons. When you release the button, the tuner will continue increasing or decreasing the frequency until the next available station is found.

Storing/Tuning Station Presets from the Front Panel **23** **24**

The RSDX-02e can store 30 FM and 15 AM presets.

To memorize presets:

1. Tune to the desired station.
2. Press the MEMORY button.
3. Press one of the CONTROL ◀/▶ buttons until the desired PRESET NUMBER flashes in the display.
4. Press the MEMORY button to store the preset.
5. To memorize another station, press a CONTROL ◀/▶ button to tune to the desired station and repeat steps 2 through 4.

NOTE: There is a time limit for these steps. If the time limit expires before memorizing a station, repeat the process.

To tune to a preset station:

1. Select the FM/AM input.
2. Press one of the CONTROL ▲/▼ buttons until the word PRESET appears in the display.

- Press or hold one of the CONTROL ◀/▶ buttons until the desired PRESET number appears in the display.

Storing/Tuning Station Presets from the Remote **P4-A P4-B**

To memorize presets:

- Tune to the desired station.
- Press the MEMORY button on Page 4 of the remote.
- Press the NUMERIC buttons on Page 4 of the remote to enter the desired PRESET NUMBER.

PRESET 5:	Press: 5
PRESET 15:	Press: +0 > 5
PRESET 25:	Press: +0 > +0 > 5
- Press the MEMORY button again to store the preset.
- To memorize another station, press the TUNING buttons to tune to the desired station and repeat steps 2 through 4.

NOTE: There is a time limit for these steps. If the time limit expires before memorizing a station, repeat the process.

To tune to a preset station:

- Select the FM/AM input.
- Press the NUMERIC buttons until the word PRESET and the desired preset number appears in the display.

PRESET 5:	Press: 5
PRESET 15:	Press: +0 > 5
PRESET 25:	Press: +0 > +0 > 5

Changing the FM MODE **24 P4-C**

The FM MODE can be changed from the default AUTO MUTING to MONO reception. In AUTO MUTING mode, a stereo signal will be heard if the station is broadcasting a stereo signal and there is sufficient signal strength. An ST indicator will light in the front-panel display. In mono mode, a mono signal will be heard even if the station is broadcasting a stereo signal.

NOTE: Switching to mono mode can improve the reception of weak or distant FM signals. Less signal strength is required for clean mono reception than for stereo reception.

To change the FM MODE from the front panel:

- While tuned to an FM station, press one of the CONTROL ▲/▼ buttons until the words FM MODE appear in the display.
- Press one of the CONTROL ◀/▶ buttons to toggle between AUTO MUTING and MONO modes as shown in the display.

To change the FM MODE from the remote:

While tuned to an FM station, press the FM MODE button on Page 4 of the remote. Each press of the button toggles between AUTO MUTING and MONO modes.

RDS Broadcast Reception

The Rotel RSDX-02e is equipped with RDS (Radio Data Systems) reception capabilities. This broadcast systems provide additional functionality by transmitting encoded information along with the radio signal on selected FM stations. This signal is decoded by an RDS receiver and can provide a range of informational features including:

- PS (Program Service):** a display of the station's identifying name (e.g. BBC1)
- PTY (Program Type):** a display of the station's program content (e.g. NEWS, SPORT, etc.)
- RT (Radio Text):** a scrolling text display for announcements or information

In addition, RDS provides several advanced search features including:

- Search for a station with the desired program content (PTY)
- Interrupt normal reception with special announcements such as TA (traffic), NEWS, or INFO from stations on the same RDS network.

NOTE: RDS services are only available on FM broadcasts. The features described below are only operational in FM mode.

The RDS are available when stations are broadcasting these data signals. When a station broadcasting an RDS signal is being received, an RDS indicator lights in the front panel display. Otherwise, the RSDX-02e functions as a standard radio receiver.

NOTE: Some of the buttons described in the following sections may have different functions for other source inputs. Be sure to select the FM/AM input on the RSDX-02e before using the tuner command buttons.

Selecting a Display mode OSD Button **P2-B**

There are four front panel display options when the currently tuned station is broadcasting RDS information and the RDS indicator in the front-panel display is lit. Press the OSD command on the Page 2 of the remote to step through the four display options:

- FREQUENCY:** The station's broadcast frequency is shown in the front-panel display. Frequency is automatically displayed when the station being received is not broadcasting RDS information.
- (PS) PROGRAM SERVICE:** The station's call letters, such as BBC1, are shown in the front-panel display.
- (PTY) PROGRAM TYPE:** A description of the station's content from a list of program types is shown in the front panel display. See the list of standard program types in the next section
- (RT) RADIO TEXT:** A scrolling text message broadcast by the station is shown in the front-panel display.

PTY Program Type Search **P4-E**

The PTY search function permits you to scan preset stations for RDS stations broadcasting a specific type of program content from the standard list of program types:

- News:** News
- Affairs:** Current affairs debate or analysis
- Info:** Advice and discussion
- Sport:** Sports programming
- Educate:** Educational programming
- Drama:** Theater or serial programming
- Culture:** National or regional cultural
- Science:** Science and technology
- Varied:** Games and interviews
- Pop M:** Popular music
- Rock M:** Rock music
- Easy M:** Easy-listening music
- Light M:** Instrumental or choral music
- Classics:** Classical music
- Other M:** Other types of music
- Weather:** Weather reports and forecasts
- Finance:** Stock market or business

Children: Children's programming

Social: Sociology, history, or psychology

Religion: Religious programming.

Phone In: Call-in or "talk" radio

Travel: Travel information

Leisure: Recreational activities.

Jazz: Jazz music

Country: American "country" music.

Nation M: Music from a particular country

Oldies: Older popular music

Folk M: Folk music

Document: Documentary programming

TEST: Testing emergency broadcast systems

Alarm !: Emergency announcement

None: Unidentified program type

To search for a specific program type while listening to an FM station:

1. Press the PTY command on Page 4 of the remote. The words PTY SELECT flash in the front panel display.
2. Select the desired PTY program type using the -/+ commands on Page 4 of the remote to scroll through the list.
3. Press the PTY command a second time within a few seconds. The tuner will attempt to find one of the 30 preset FM stations broadcasting the selected type of RDS program and tune that station. If the button is not pressed within a few seconds after selecting a program type, the PTY search function will be cancelled.
4. If no station is located for the desired content type, the words NOT FOUND appear in the front panel display.
5. You can search again within a few seconds after finding the first PTY station by pressing the PTY command again.

TA/NEWS/INFO Search **P4-D**

This function switches temporarily to an RDS station on the same network as the currently tuned station when an RDS traffic, news, or info announcement is broadcast. When the announcement is complete, reception returns to the previously tuned station.

You can search for three different types of RDS announcements:

- **TA:** Traffic announcements
- **NEWS:** News bulletins
- **INFO:** Bulletins or warnings

To use this special RDS feature while listening to an FM station:

1. Repeatedly press the TA command on Page 4 of the remote until the desired type(s) of announcements appears in the display:

TA
NEWS
INFO
TA/NEWS
TA/INFO
NEWS/INFO
TA/NEWS/INFO
NONE

2. If the currently tuned station broadcasts the selected type of RDS announcement, the program type indicator flashes in the display.
3. If another station in the same RDS network broadcasts an announcement of the selected type, the RSDX-02e switches to that station for the announcement and then returns to the previously tuned station. While the announcement is being broadcast, the PTY type indicator in the display flashes.
3. Cancel the automatic announcement feature by selecting NONE in step 2 above – no PTY type is shown in the display.

When a special announcement is being received, the RSDX-02e will not switch to a station broadcasting a different announcement

NOTE: This feature is only available for RDS stations broadcasting Enhanced Other Networks data.

Automatic RDS Alert and Test

When listening to an RDS network signal, the RSDX-02e will automatically switch to ALERT! or TEST announcements, regardless of the setting selected above.

DVD PLAYER

About Discs

This section covers basic information on the types of discs that can be played in the RSDX-02e.

Disc Formats

The RSDX-02e can automatically detect and play several different types of disc formats.

Look for the standard logo on the packaging for each of the following types of disc the RSDX-02e can play:

DVD Video	
DVD Audio	
Video CD	
SVCD	
Audio CD	

NOTE: The RSDX-02e can play recorded MP3 and JPEG files from most CD-R, CD-RW, DVD-R, and DVD+R discs. The unit can only play the audio content on CD-EXTRA, CD-G, and CD-TEXT discs. The RSDX-02e cannot play DVD-ROM, DVD-RAM, CD-ROM and DVD+/-RW discs.

DVD Region Codes

DVD-Video discs are encoded with region codes which also appear on the packaging:

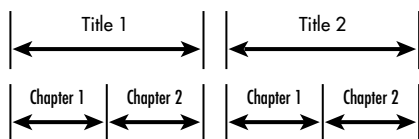


A disc can only be played if its region code matches the code printed on the back-panel of the RSDX-02e.

Disc Structure

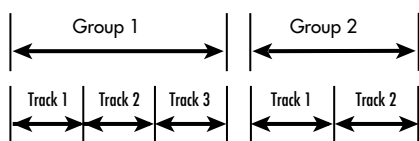
Each type of disc has its own organization, allowing you to locate various portions of the program recorded on the disc. Depending on the type of disc, these may be called *Titles*, *Groups*, *Chapters*, or *Tracks*:

DVD-Video:



A DVD-Video disc is comprised of *Titles* and each title may be divided into *Chapters*. For example, a DVD-Video disc may contain several movies, each with its own *Title* number, and each movie may be divided into several *Chapters*. In a DVD-Video karaoke disc, each song usually has its own title number and does not have *Chapters*.

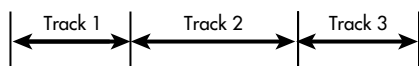
DVD-Audio:



A DVD-Audio disc contains *Groups*, with each group divided into *Tracks*. Some DVD-Audio discs also contain a *Bonus Group* that can only be played back by entering a *Key Number* password.

Most DVD-Audio discs include other information in addition to audio, such as still pictures, movies and text.

Audio CD:



An Audio CD, Video CD or SVCD simply contains *Tracks*.

Digital Audio Formats

DVD and CD discs can be encoded with several different digital audio formats. Generally, the type of digital audio encoding is indicated on the disc packaging.

- **Dolby Digital.** A digital surround format that may contain as many as five discrete audio channels plus an LFE (low frequency effects) channel (referred to as 5.1 channel surround). Particularly for older

soundtracks, Dolby Digital may be used for a 2.0 channel stereo soundtrack with Dolby Surround matrix encoding.

- **DTS (Digital Theater Systems).** Another 5.1 channel digital surround format similar to Dolby Digital, but somewhat different encoding characteristics. Also plays the DTS 96/24 used on DTS music discs.
- **MPEG.** Another compressed digital format.
- **DVD-Audio and MLP (Meridian Lossless Packing).** A high quality digital format for DVD-Audio with the compression ratio of about 2:1 supporting up to 192kHz sampling rate and 24-bit resolution, allowing the PCM signal to be recreated without loss. Some content may only be available at the analog outputs.
- **LPCM (Linear PCM).** Uncompressed digital audio, the format used on CDs and most studio masters.
- **MP3 (MPEG 1, Layer 3).** Compressed 2-channel digital audio, a format often used for music on recordable CD-R and CD-RW discs.

Playing DVDs

NOTE: Some of the buttons described in the following sections may have different functions for other source inputs. Be sure to select the DVD input on the RSDX-02e before using the DVD command buttons.

Inserting a Disc 15 P3-G

A disc drawer slides out to accept a disc and retracts for playback. Place the disc in the drawer label-side up. Make sure the disc is properly centered in the tray. The OPN/CLOSE button on the front panel or the EJECT button on Page 3 of the remote opens or closes the drawer.

Playing a Disc 19 P3-A

Press the PLAY ► button on the front panel or Page 3 of the remote to start playing the disc from the beginning. If the disc drawer is open, it will close automatically.

NOTE: Many DVDs either begin playing automatically or display a start-up menu as soon as the disc is inserted.

The PLAY ► button usually starts play from the beginning of the disc, except after the PAUSE || button has been pressed. In this case, the disc will resume playing from the current location. The RSDX-02e also has a RESUME feature that restarts play at the current location after pressing the STOP ■ button one time during playback.

NOTE: Pressing the PLAY ► button during DVD-Video playback skips back about 10 seconds and resumes playback.

Stopping Disc Playback 18 P3-A

Press the STOP ■ button to stop a disc that is playing.

The first press of the STOP ■ button memorizes the point at which the disc stopped playing as indicated by RESUME appearing in the front panel display. Resume play at that point by pressing the PLAY ► button. This stored position remains in memory until the unit is turned off, the disc drawer is opened, or the top menu is selected.

The second press of the STOP ■ button clears the RESUME position.

Pause/Still Frame 20 P3-A

Press the PAUSE || button to temporarily suspend play. To resume playing the disc from the current location, press the PLAY ► button.

Still-Frame: When playing a video disc, a still-frame picture remains on the TV screen with no sound when the PAUSE || button is pressed. Press the button again to advance to the next still-frame picture. Each button press advances one frame.

Skip forward/back

16 17 E P3-A

The TRACK ◀◀ ▶▶ buttons skip forward/back to the beginning of the next selection. During playback, pressing the right TRACK ◀◀ ▶▶ button once advances to the beginning of the next *Title*, *Chapter*, or *Track*. Pressing the left button returns to the beginning of the current scene or song. Pressing twice in succession returns to the beginning of the previous track.

Press the button as many times as necessary to find the desired scene or selection.

NOTE: The CH+/- hard buttons on the remote duplicate the function of the TRACK I◀◀ ▶▶I buttons when operating the DVD player.

With a DVD-Audio or Audio CD, this feature also works to find a selection when playback is stopped. This feature may not work with Video CD/SVCD discs with the PBC function enabled.

NOTE: There are other methods of locating specific selections on a disc, including direct access with the NUMERIC buttons and using the On-Screen Menu features. See *Playing Specific Selections* for details.

High Speed Play P3-A

The SEARCH ◀◀ ▶▶ buttons (remote only) allow you to activate high speed play, either forward or reverse.

During playback, press and release the SEARCH ◀◀ ▶▶ buttons to begin video and audio playback at 2x normal speed, backwards or forwards. Each time you press the button again, the playback speed increases from to 5x, 10x, 20x, or 60x normal speed (2x, 5x, 10x, 20x for DVD AUDIO/VCD/SVCD/CD). Press PLAY ▶ to resume normal playback.

Alternatively, you can press and hold the TRACK I◀◀ ▶▶I buttons to increase speed to 5x normal. If you continue holding the buttons, the speed will eventually increase to 20x normal speed. Release the button to return to normal playback

Slow Speed Play P3-A

For slow motion play, press the PAUSE II button. Then, press the SEARCH ◀◀ ▶▶ on the remote to begin slow motion play. Each press of the button steps through additional speed options (1/32 speed, 1/16 speed, 1/8 speed, 1/4 speed, 1/2 speed). Press PLAY ▶ to resume normal playback. Slow motion reverse play is only available on DVD-Video discs.

NOTE: The sound is muted during slow-motion play. Slow-motion is not available on Audio CDs.

On-Screen Display (OSD)

P2-B P1-D

1. When the DVD input is active, press the OSD button on Page 2 of the remote to display a status bar on the TV.



On the top line, the status bar shows the type of disc being played, the bandwidth, the current Title/Chapter/Group/Track info, a time indicator and play status.

2. Press the OSD button a second time and a new status bar appears with drop down menu item, selectable by pressing the CURSOR ◀/▶ buttons to move the selection arrow.



3. Once a drop down menu is selected, adjustments can be made using the CURSOR ▲/▼ buttons to step through the available options.
4. Press the OSD button again to cancel the status bar display

Time Display P2-B P1-D

The disc time indicators in the front panel display and the On-Screen Display can show several different types of information for DVD-Audio, Audio CD, and Video CD/SVCD discs. Options include elapsed time or remaining time for a single selection (chapter or track) or entire disc (or *Title* for DVD-Video). To change the time display:

1. Press the OSD button on the remote twice. A display window appears on the TV screen.
2. Press the CURSOR ◀/▶ buttons repeatedly to select the TIME field.
3. Press the CURSOR ▲/▼ buttons to step through the available options:

TOTAL: Elapsed disc time

T. REM: Remaining total disc time

TIME: Elapsed playing time of the current Chapter/Track

REM: Remaining time of the current Chapter/Track

Advanced Features

The RSDX-02e provides several advanced features for controlling the audio/video content displayed during playback. These include zooming, changing the scene angle on DVD-Video discs, selecting alternate languages for the audio portion of DVD programs, and selecting subtitle languages on DVD programs.

NOTE: Some of the buttons described in the following sections may have different functions for other source inputs. Be sure to select the DVD input on the RSDX-02e before using the DVD command buttons.

Zoom P2-D P1-D

When playing a video disc, the RSDX-02e can zoom in to enlarge a section of the picture up to 64 times its original size. The zoom feature is available for full-motion video during playback or for still-frame pictures while the unit is paused. While zoomed, you can move the displayed image up, down, left, or right to view the desired portion of the full image.

To zoom in, press the ZOOM button Page 2 of the remote. Each press of the ZOOM button changes the size of the picture: 1.8x, 4x, 8x, 16x, 32x, 64x, and back to normal size. An icon at the top left of the screen shows the current magnification.

To move the zoomed-in video image, press the CURSOR ◀/▶/▲/▼ buttons on Page 1 of the remote in the desired direction. The zoomed image moves up, down, left, or right to show the desired portion of the full image.

Press PLAY ▶ to resume normal playback.

Selecting a Scene Angle P3-B

Some DVD-Video discs have scenes that can be viewed from multiple camera angles. Discs with multiple angles may provide menu screens for angle selection. Or, select different angles (if available) by pressing the ANGLE button on Page 3 of the remote. A pop-up window appears on screen indicating which angle is selected and how many angles are available. Press the ANGLE button repeatedly to step through the available angles.

Selecting Subtitles **P3-C**

Some DVD-Video, DVD-Audio, and Video CD/SVCD discs can display subtitles in various languages during playback. Typically, you select these subtitles with the disc's setup menus.

In addition, you can change the subtitles during playback by pressing the SBTITLE button on Page 3 of the remote. A pop-up display shows the current subtitle language and its number along with the total number of subtitle options. Press the SBTITLE button repeatedly until the desired subtitle is selected.

Selecting Audio Tracks **P3-D**

Some DVD-Video, DVD-Audio, and Video CD/SVCD discs have audio tracks recorded in alternate languages, alternate audio formats (such as Dolby Digital 2.0, Dolby Digital 5.1, or DTS) or with alternate content (such as director's commentary). Typically, these audio tracks are selected with the disc's setup menus, which appear when you insert the disc or which can be accessed during playback by pressing the MENU button.

In addition, you can change to an alternate audio track during playback by pressing the AUDIO button on Page 2 of the remote. A pop-up window shows the current audio track number and description along with the total number of audio tracks. Press the AUDIO button repeatedly until the desired audio track is selected.

Setting Video Picture Adjustments (VFP) **P6-E P1-D**

The VFP function allows you to select one of four picture modes: Normal, Cinema, User 1, and User 2. Each mode stores several picture settings:

GAMMA: adjusts the brightness of mid-tone colors without changing bright or dark colors.

BRIGHTNESS: adjusts the black level, the darkness of blacks.

CONTRAST: adjusts the white level, the brightness of white and near white colors.

SATURATION: adjusts the amount color saturation

TINT: adjusts the color balance

SHARPNESS: increases the sharpness of the picture at the expense of making noise in the picture more apparent

Y-DELAY: adjusts the timing of the luminescence and chroma to reduce ghosting.

Select the Normal mode for general viewing. Select the Cinema mode for movie viewing. Select one of the two User modes if you wish to define and use two custom viewing modes.

To select a picture mode:

1. Press the VFP button on Page 6 of the remote to display the current VFP settings on the TV screen.
2. Press the CURSOR ◀/▶ buttons repeatedly to select the desired picture mode.
3. Press the VFP button again to cancel the display.

To change picture settings:

1. Repeat steps above, selecting either USER 1 or USER 2 modes to modify.
2. Press the CURSOR ▲/▼ buttons repeatedly to select the parameter you wish to adjust.
3. Press OK. A pop-up window for that parameter appears.
4. Press the CURSOR ▲/▼ buttons to adjust the selected parameter. Changes are saved automatically.
5. Press the VFP button again to cancel the display or the display will disappear after 10 seconds.

Still Pictures on DVD-A Disc **P3-F**

Many DVD-Audio discs contain still pictures which can be viewed during playback. To view the still pictures, press the PAGE button PAGE 3 of the remote. Press the button again to advance to the next picture.

Playing Specific Selections

The RSDX-02e provides several methods for locating specific selections from a disc. The simplest method, using the TRACK ◀◀ ▶▶ buttons, is covered in the *Basic Features* topic. This section details additional methods, such as finding a selection with the disc menu, the On-Screen Display, or the Digest (thumbnail images of the disc's content). Also covered is the use of NUMERIC buttons to specify selections along with advanced features like random, program, and repeat play functions.

Please review the *About Discs* section of this manual to learn how various types of discs are divided into *Titles*, *Chapters*, and *Tracks*. Finding selections on various disc formats may require slightly different procedures as noted in the following instructions.

Find Scenes from a DVD Menu

P1-B P1-C P1-D

DVD-Video and DVD-Audio discs usually have scene selection menus that display the selections on the disc on the TV screen.

To make selections from a disc menu:

1. Press the MENU or TP MENU button on the remote if the disc's menu is not already displayed.
2. Press the CURSOR ◀/▶/▲/▼ buttons to highlight the scene selection option and press the OK button.
3. Use the CURSOR ◀/▶/▲/▼ buttons to find the desired scene, then press the OK button to begin playback.

Find a Scene from a Video CD/SVCD Menu **P4-A P2-E**

Some Video CD/SVCD discs have a feature called PBC (PlayBack Control) which provides a menu system similar to the DVD menus. With a PBC-enabled disc in the player, the PBC menu appears on the TV screen automatically when the PLAY ▶ button is pressed.

To use the PBC menus:

1. Press the PLAY ► button. A display window appears on the TV screen, showing the available selections.
2. Press the NUMERIC buttons on Page 4 of the remote to select a scene. To select item 1, press the 1 button. To select item 14, press the +0 button and then the 4 button. Playback of the selected scene begins automatically.
3. Press the RETURN button on Page 2 of the remote to display the menu again.
4. If NEXT or PREVIOUS appear on screen during playback, use the TRACK ◀◀ ▶▶ buttons to move to the next or previous scene. This feature may differ on some discs.

To disable the PBC feature, start playback by entering the scene number using the NUMERIC buttons instead of pressing PLAY ►. See the next topic for direct access selection using the NUMERIC buttons.

To reactivate the PBC feature: If you have disabled the PBC feature and want to reactivate it, press STOP ■ to halt playback, then PLAY ► to display the PBC menu.

Selecting a Title/Group

P4-G P3-A P4-A

DVD-Video or DVD-Audio discs:

On DVD-Video discs, this feature is available at any time (except when a menu screen is already displayed on the TV screen).

1. Press the TTL/GROUP button on the remote. A display window appears on the TV screen.
2. Press the TRACK ◀◀ ▶▶ buttons repeatedly to select desired *Title* or *Group*.
3. Or, enter the new selection number using the NUMERIC buttons. For example, to select the 10th track, press 1, then 0.
4. Press OK to begin play at the selected point.

Entering a Scene Number

P2-B P1-D P4-A

DVD-Video or DVD-Audio discs:

On DVD-Video discs, this direct access feature is available at any time (except when a menu screen is already displayed on the TV screen).

1. Press the OSD button on the remote twice. A display window appears on the TV screen.
2. Press the CURSOR ◀/▶ buttons repeatedly to select the CHAP ⇄ or TRACK ⇄ field.
3. Enter the new selection number using the NUMERIC buttons. For example, to select the 10th track, press 1, then 0.
4. Press OK to begin play at the selected point.

Audio-CD discs:

When playing an Audio CD, pressing the OSD button is not necessary. Simply enter the desired track number with the NUMERIC buttons and playback begins at the selected track. This feature is available at any time, whether the disc is playing or stopped.

Find a Location with Time

Search P2-B P1-D P4-A

You can play a DVD-Video from a desired location by specifying the elapsed time from the beginning of the current *Title* using the TIME SEARCH function. This direct access time feature is available at any time (except when a menu screen is already displayed on the TV screen).

DVD-Video or DVD-Audio discs:

1. Press the OSD button on the remote twice. A display window appears on the TV screen.
2. Press the CURSOR ◀/▶ buttons to select the ⌚ field.
3. Enter the desired time in the format HOURS:MINUTES:SECONDS using the NUMERIC buttons.
4. Press PLAY ► to begin play at the selected point.

Repeat Play P2-B P1-D P3-E

The Repeat Play feature is available for DVD-Video, DVD-Audio, Audio CD, and Video CD/SVCD discs. The feature continuously repeats a single selection or a number of selections until you stop play.

On a DVD-Video disc, you can repeat a single *Chapter* or the whole *Group*. On a DVD-Audio disc, a single *Track* or the entire *Group*. On other discs, a single *Track* or the entire disc.

Repeat play is not available on Video CD/SVCD discs with the PBC feature active.

To begin Repeat Play:

1. Press the OSD button on the remote twice. A display window appears on the TV screen.
2. Press the CURSOR ◀/▶ buttons to select the REPEAT ⇄ OFF field.
3. Press the CURSOR ▲/▼ buttons to select the REPEAT mode as follows.

DVD-Video:

CHAPTER ⇄ TITLE ⇄ A/B ⇄ OFF

DVD-Audio:

TRACK ⇄ ALL/GROUP ⇄ A/B ⇄ OFF

CD and Video CD/SVCD:

TRACK ⇄ ALL ⇄ A/B ⇄ OFF

4. Press the OK button. Repeat play of the desired selection begins and continues indefinitely.

To stop Repeat play:

5. Press STOP ■ to stop playback. On a DVD-Video disc, the repeat mode is cancelled entirely.
6. On all other discs, playback stops but repeat mode remains active. To cancel repeat mode, repeat the above steps, selecting the OFF mode.

For A-B Repeat:

A-B Repeat Play is available for all discs. During playback, you specify a starting point (Point A) and an ending point (Point B). The unit will continuously repeat the marked passage.

To use A-B Repeat, follow the above steps, selecting A-B Repeat mode. Then, press the OK button at the point where A-B play should begin and press OK a second time at the point where A-B repeat should end.

Using REPEAT Button:

You can also select any repeat mode (except A-B repeat) directly, by pressing the REPEAT button on Page 3 of the remote repeatedly until the desired mode is selected.

Random Play **P2-B** **P1-D**

The Random Play feature is available for DVD-Audio, Audio CD, and Video CD/SVCD disks. The feature plays all of the tracks once in random order.

To begin Random Play:

1. Press the OSD button on the remote twice. A display window appears on the TV screen.
2. Press the CURSOR ◀/▶ buttons to select the RAND field.
3. Press OK to begin Random Play.
4. Press STOP ■ to stop Random Play.

Program Play **P2-B** **P1-D** **P3-A**

The Program Play feature is available for DVD-Audio, Audio CD, and Video CD/SVCD disks. The feature allows you to play up to 99 tracks in any desired order.

To begin Random Play:

1. Press the OSD button on the remote twice. A display window appears on the TV screen.
2. Press the CURSOR ◀/▶ buttons to select the PROG field.
3. Enter a *Group* number or *Group* and *Track* number, for the first desired track, using the NUMERIC buttons on the remote.
4. Press the CURSOR ▲/▼ buttons to move to the next field and enter the second selection. Continue programming up to 99 selections.
5. Press PLAY ▶ to begin Program play.
6. Press STOP ■ to stop Program Play.

MP3 and JPEG files

The RSDX-02e can play recorded MP3, VCD, and JPEG files from most CD-R, CD-RW, DVD-R, and DVD+R discs.

These discs, often recorded on computer drives, have a file structure similar to computer discs, with files stored in folders. Selecting files for playback and other features are made using a special Control menu.

Control Menu

Whenever a disc containing MP3, MPEG or JPEG files is inserted in the RSDX-02e or when the PLAY ▶ button is pressed, the CONTROL menu appears.

On the left side of the menu is a list of folders on the disc. When a folder is selected, the list of files in that folder is displayed down the right side of the screen.

To move between the two areas of the screen (folder list, track list), repeatedly press the CURSOR ◀/▶ until the selection highlight is in the desired area.

To select a folder: Use the CURSOR ◀/▶ buttons to move to the left side of the screen. Then, use the CURSOR ▲/▼ buttons to select the desired folder.

To select a track: Use the CURSOR ◀/▶ buttons to move to the left side of the screen. Then, use the CURSOR ▲/▼ buttons to select the desired track.

Additional JPEG features

When displaying JPEG photo images, the following additional features are available:

SLIDE SHOW: Press the RESUME button repeatedly to select one of 11 slide show modes that automatically display images. You can also select RANDOM play or NONE (no slide show).

ROTATE: Except in Zoom mode, press the CURSOR ◀/▶ buttons to rotate the image clockwise or counterclockwise.

REPEAT: In addition to the repeat options described in the previous section, press the REPT button to cycle through the available repeat modes.

ZOOM: To zoom a displayed image, press the ZOOM button. Then, press the SEARCH ◀◀ ▶▶ buttons repeatedly to make the image progressively smaller or larger. In zoom mode, the CURSOR ◀/▶/▲/▼ buttons move the image in any direction to show the desired area of the image.

SETUP

The RSDX-02e must be configured before use. Some of the settings are essential for proper operation and best performance. Others are optional settings to maximize the convenience of the system or tailor operation for individual preferences.

The RSDX-02e has three groups of setup or adjustment procedures:

1. **Quick Setup:** Simplified procedure for the most important basic speaker settings
2. **Comprehensive Setup:** More detailed group of settings allowing more precision for the basic settings than the Quick Setup.
3. **Sound adjustments:** A group of audio related adjustments such as speaker levels, balance, tone, etc.
4. **Choice Menus:** On-Screen Menu system with additional features and options.

For the easiest basic setup, complete the Quick Setup procedure before using the RSDX-02e. Later, you can return to the Comprehensive Setup options and further customize your system. Or, experienced users can skip the Quick Setup and complete the entire Comprehensive Setup right away. The Choice Menus provide additional settings to customize the system and a menu-driven alternative to some of the Comprehensive Setup settings.

Quick Setup

The Quick Setup provides a simplified setup procedure for the most basic system settings including the number and size of speakers in the system, their distance from the listener, and whether the system has a subwoofer. Quick Setup should be completed after all connections are made, but before the system is used.

NOTE: *Quick Setup must be done using only the front panel buttons.*

To begin the Quick Setup:

1. Press the SETTING button on the front panel.
2. Repeatedly press the CONTROL ▲/▼ buttons on the front panel to step through the available items until QUICK SETUP appears in the front panel display.

3. Press the MEMORY button. ENTER THE NUMBER OF SPEAKERS scrolls in the display followed by 5 SPEAKERS, indicating the default setting for a five speaker system.
4. Use the CONTROL ◀/▶ buttons on the front panel to adjust the number of speakers to match your system.
 - 5 SPEAKERS:** Select when you have front speakers, surround speakers, and a center channel speaker.
 - 4 SPEAKERS:** Select when you have front speakers, surround speakers, but no center channel speaker.
 - 3 SPEAKERS:** Select when you have front speakers, a center channel speaker, but no surround speakers.
5. Press the MEMORY button. ENTER USE OF SUBWOOFER scrolls in the display followed by SUBWFR USE, indicating the default setting for a subwoofer in the system.
6. Use the CONTROL ◀/▶ buttons on the front panel to adjust the number of speakers to match your system.
 - USE:** Select if you have a powered subwoofer connected to the system.
 - NO:** Select if you do not have a subwoofer.
7. Press the MEMORY button. ENTER ROOM SIZE scrolls in the display followed by SMALL ROOM, indicating the factory default setting for a smaller room.
8. Use the CONTROL ◀/▶ buttons on the front panel to adjust the number of speakers to match your system.

SMALL: Select if your listening position is 8ft (2.4m) from the front speakers and 5 ft (1.5m) from the surround speakers.

MEDIUM: Select if your listening position is 9ft (2.7m) from the front speakers and 5 ft (1.5m) from the surround speakers.

LARGE: Select if your listening position is 10 ft (3.0m) from the front speakers and from the surround speakers.

NOTE: If your room doesn't match one of these options, custom settings are available in the Comprehensive Setup procedure that follows.

8. Press the MEMORY button to complete the procedure. SETUP END appears briefly in the display and the RSDX-02e returns to normal operation with the new settings.

Comprehensive Setup

The Comprehensive Setup provides more detailed setup procedure for configuring the RSDX-02e to operate in your system.

Setup Procedure

The Comprehensive Setup uses the front panel control buttons and the front panel display and cannot be done from the remote control except where noted.

To begin the Comprehensive Setup:

1. Press the SETTING button on the front panel. The first adjustment item appears in the front panel display.
2. Use the CONTROL ▲/▼ buttons on the front panel to step through the available settings in the Comprehensive Setup procedure. Each press of a CONTROL ▲/▼ button advances up or down to the next available item as shown in the front panel display:

SUBWFR: Subwoofer setting

FRNT SP: Front speaker setting

CNTR SP: Center speaker setting

SURR SP: Surround speaker setting

FRNT D: Front speaker delay

CNTR D: Center speaker delay

SURR D: Surround speaker delay

CROSS: Crossover frequency setting

LFE: Surround Speaker setting

D.COMP: Dolby Digital dynamic range compensation setting

DGT: Digital input assignment

AUTO SR: Automatic surround mode

QUICK SETUP: Quick Setup procedure

MODE: Automatic power mode

3. Use the CONTROL ◀/▶ buttons on the front panel to adjust the item currently shown in the front panel display.

The following topics describe the settings for each item.

Subwoofer Setting (SUBWFR)

The SUBWFR item configures the RSDX-02e for use with or without a powered subwoofer. Use the CONTROL ◀/▶ buttons to select one of two settings:

- **YES:** Select this setting if you have connected a powered subwoofer.
- **NO:** Select this setting if your system does not have a powered subwoofer.

Speaker Settings (FRNT SP, CNTR SP, SURR SP)

The next three items configure the front speakers, center speaker, and surround speakers in the system.

For each type of speaker, use the CONTROL ◀/▶ buttons to choose one of three options:

- **LRG:** Select the LARGE setting if the speaker(s) for this item are capable of reproducing deep bass.
- **SMI:** Select the SMALL setting to redirect the deep bass from the speaker(s) for this item to a powered subwoofer or to large speakers in the system.
- **NO:** Select this setting if you do not have speaker(s) for this item in the system. For example, if you do not have surround speakers, select NO for the SURR SP item.

NOTE: The NO option is not available for the front speakers. If you have previously selected NO for the subwoofer, the front speakers are automatically set to LARGE.

In the vast majority of systems with a powered subwoofer, all speakers should be set to SMALL so that their deep bass is redirected to the subwoofer. This will almost always result in better overall bass performance and a system that will play louder and cleaner, even when the front speakers are physically large.

Delay Settings (FRNT D, CNTR D, SURR D)

The next three items set the length of digital delay for each type of speaker so that the sound from all speakers arrives at your ear simultaneously. Thus, speakers that are closer to you need longer delay than speakers that are farther away.

The actual delay times are calculated by the RSDX-02e. All you have to do is measure the distance from your listening position to each group of speakers and enter the setting here. There are separate settings for front speakers, center channel speaker, and surround speakers.

- For each type of speaker, use the CONTROL ◀/▶ buttons to enter the distance to the that speaker from your listening position (in feet). The range of options is from 1 ft. to 30 ft. in 1 foot increments.

NOTE: If you have previously selected NO for either the center or surround speakers, there will no corresponding Delay Setting item.

Crossover Frequency Setting (CROSS)

The deep bass intended for any speaker configured as SMALL is redirected to the powered subwoofer or to LARGE speakers based on the settings of the digital crossover in the RSDX-02e. This item determines the crossover frequency. Bass below the crossover frequency is redirected; sounds above the crossover frequency are sent to the original speaker. One crossover frequency is used for the entire system. Use the CONTROL ◀/▶ buttons to select one of three crossover frequencies:

- **80Hz:** Select this setting for an 80Hz crossover frequency.
- **100Hz:** Select this setting for an 100Hz crossover frequency.
- **120Hz:** Select this setting for a 120Hz crossover frequency.

The selection of a crossover point is largely determined by the capabilities of your speakers. Lower crossover points may improve blending of the subwoofer to the rest of the system. Higher crossover points will increase the power handling of the speakers and the ability of the system to play loudly without less distortion.

As a starting point, we recommend the 80Hz crossover if all of your speakers have a woofer size of 6 inches or larger. Try the 100 Hz crossover point if your smallest speakers have 5 inch woofers. If any of your speakers have a woofer of 4 inches or smaller, the 125Hz crossover will probably be the best choice. The audible differences in the three crossover points will be subtle.

NOTE: If you have previously configured all of your speakers as LARGE, the crossover frequency item will not appear.

LFE Attenuation Setting (LFE)

Dolby Digital and DTS recordings have a special Low Frequency Effects channel used exclusively for low bass and typically reproduced by a subwoofer. When played at its standard level, this bass channel can place great demands on a system. This setting gives you the ability to reduce the level of the LFE channel if you hear bass distortion. Use the CONTROL ◀/▶ buttons to select one of two settings:

- **0dB:** The normal setting, reproduces the LFE channel at its full level.
- **-10dB:** Reduces the level of the LFE channel by 10 decibels.

NOTE: The LFE attenuation setting has no effect with any input signal other than Dolby Digital or DTS.

As a general recommendation, start with the setting at 0dB (the factory default). If you hear bass distortion during loud passages in Dolby Digital or DTS soundtracks, try the -10dB setting. The need for the LFE attenuation will be more likely in less capable systems or systems without a subwoofer.

Dynamic Range Compression (D.COMP)

Dolby Digital recordings are capable of wide dynamic range (the difference between the softest and loudest sounds). In some cases, this may tax amplifiers and/or speakers. In other cases, you may want to reduce the dynamic range when listening at low volume levels.

Use the CONTROL ◀/▶ buttons to select one of three dynamic range settings:

- **MID:** slightly reduced dynamic range, roughly comparable to the signal from a compact disc
- **MAX:** more heavily reduced dynamic range, but still comparable to the signal from a typical VHS Hi-Fi recording.
- **OFF:** full dynamic range; no compression

NOTE: The Dynamic Range Compression feature ONLY affects Dolby Digital signals.

As a guideline, try the OFF setting for maximum performance with capable speaker systems. If you hear distortion or regularly reduce the volume because loud action scenes are too loud, try one of the other settings. By using dynamic range compression, you can increase the overall volume level to better hear dialog without the loudest action scenes being quite so loud.

Digital Input Assignment (DGT)

The RSDX-02 has two digital audio inputs on the back panel. DIGITAL 1 accepts a coax cable. DIGITAL 2 accepts an optical cable.

These digital inputs can be assigned to any of three source inputs: the STB button, the TV button, or the CDR button to accommodate a variety of systems and cabling options.

Use the CONTROL ◀/▶ buttons to the digital input assignments:

- **1 STB 2 TV:** assigns Digital 1 to the STB input and Digital 2 to the TV input.
- **1 STB 2 CDR:** assigns Digital 1 to the STB input and Digital 2 to the CDR input.
- **1 TV 2 STB:** assigns Digital 1 to the TV input and Digital 2 to the STB input.
- **1 TV 2 CDR:** assigns Digital 1 to the TV input and Digital 2 to the CDR input.
- **1 CDR 2 STB:** assigns Digital 1 to the CDR input and Digital 2 to the STB input.
- **1 CDR 2 TV:** assigns Digital 1 to the CDR input and Digital 2 to the TV input.

NOTE: If you assign a digital connection to the CDR input, you should also change the input name from TAPE to CDR. See the topic Changing Input Name.

Automatic Surround Mode (AUTO SR)

The RSDX-02e can automatically activate the proper surround sound mode for digital inputs.

When a Dolby Digital 5.1 soundtrack is received, DD 5.1 decoding is automatically activated.

When a DTS 5.1 soundtrack is received, DTS decoding is automatically activated.

When a Dolby Digital 2.0 soundtrack with matrix encoding is detected, Dolby Pro Logic II Movie decoding is automatically activated.

When a 2-channel Dolby Digital or DTS source is detected, Stereo mode is automatically activated.

Use the CONTROL ◀/▶ buttons to turn auto surround on or off:

- **ON:** enables auto surround.
- **OFF:** disables auto surround.

For most convenient operation of the system, leave this setting in the default ON setting. You can still temporarily choose a different surround mode for an input by pressing the SURROUND ON/OFF button.

NOTE: The Auto Surround feature does not have an effect on analog input signals or when the DGTL DD or DGTL DTS are manually selected as a fixed surround mode for the DVD player.

Quick Setup

Selecting this item starts the quick setup procedure. See the previous Quick Setup topic in this manual for details.

Automatic Power Mode (MODE)

The RSDX-02e has a special auto power mode that will activate the RSDX-02e and select a source input when a video component is turned on.

NOTE: Auto power mode is only available for video components connected with SCART cables.

Use the CONTROL ◀/▶ buttons to select the desired auto power mode:

- **MANUAL:** The default setting. Auto power mode is not used and the RSDX-02e operates normally with manual power on/off and source selection
- **AUTO 1:** When the RSDX-02e is active, turning on a video component or starting VCR playback selects that source input automatically.
- **AUTO 2:** Provides automatic source selection and power on/off as follows:

When a video source is turned on or VCR playback is started and the RSDX-02e is already active, the correct source input is selected. If the RSDX-02e is not turned on, the AUTO 2 mode puts the unit in TV direct mode and selects the correct video input.

When the selected source component is turned off and the RSDX-02e is active or in TV direct mode, the AUTO 2 mode automatically reverts to the last previously used source input.

Sound Adjustments

The Sound Adjustments provide several settings for obtaining the best sound from your system.

Setup Procedure

The Sound Adjustments procedure uses the front panel control buttons and the front panel display. In addition, all of the adjustments can also be made directly from the remote control except the front speaker balance adjustment.

To begin Sound Adjustments:

1. Press the ADJUST button on the front panel. The first adjustment item appears in the front panel display.
2. Use the CONTROL ▲/▼ buttons on the front panel to step through the available settings in the Sound Adjustments procedure. Each press of a CONTROL ▲/▼ button advances up or down to the next available item as shown in the front panel display:
 - BAL:** Front speaker balance
 - BASS:** Increase or decrease bass
 - TREBLE:** Increase or decrease treble
 - SUBWFR:** Subwoofer level
 - CENTER:** Center speaker level
 - SURR L:** Left surround speaker level
 - SURR R:** Right surround speaker level
 - EFFECT:** Adjust intensity of DSP effects
 - AUDIO POS:** Reduce subwoofer level for stereo surround modes
3. Use the CONTROL ◀/▶ buttons on the front panel to adjust the item currently shown in the front panel display.

The following topics describe the settings for each item.

Front Speaker Balance (BAL)

The BAL item allows you to adjust the left/right balance of the front speakers. Use the CONTROL ◀/▶ buttons to shift the sound to the left or right:

- **CENTER:** The standard setting with the sound balanced equally between the two front speakers.
- **L (-):** Settings indicated by an L followed by a negative number indicate that the volume of the left speaker is reduced and the sound shifted towards the right.
- **R (-):** Settings indicated by an R followed by a negative number indicate that the volume of the right speaker is reduced and the sound shifted towards the left.

The adjustment range is from -1 to -21.

NOTE: This setting is memorized independently for each source input and becomes a permanent setting until it is changed.

Tone Adjustments (BASS and TREBLE) P6-A P6-B

These two items allow you to adjust the bass and treble response of the system. Select the BASS item to increase or decrease the low frequency output. Select the TREBLE item to increase or decrease the high frequency output. Use the CONTROL ◀/▶ buttons to adjust each item:

- **0:** The standard setting with no increase or decrease.
- **(-):** Negative numbers indicate a decrease in bass or treble.
- **(+):** Positive numbers indicate an increase in bass or treble.

The adjustment range is from -10 to +10.

From the remote control:

- Press the BASS + or BASS - command on page 6 of the remote to increase or decrease bass.
- Press the TREBLE + or TREBLE - command on page 6 of the remote to increase or decrease treble.

NOTE: Tone adjustments are memorized independently for each source input.

Speaker Levels (SUBWFR, CENTER, SURR L, SURR R) **P5-A P5-B P5-C P5-D P5-E**

These two items allow you to adjust the output levels of the subwoofer, center channel speaker, left surround speaker, and right surround speaker. Use the CONTROL ◀/▶ buttons to increase or decrease the output level for the selected type of speaker:

- **0:** The standard setting with no increase or decrease relative to the front speakers.
- **(+):** Positive numbers indicate an increase in output level.
- **(-):** Negative numbers indicate an increase in bass or treble.

The adjustment range is from -10 to +10. In a perfectly adjusted system, all of the speakers should be matched as closely as possible in volume output.

NOTE: Center and Surround speaker settings can only be made while a multichannel surround mode is active.

From the remote control:

- Press the SUB + or SUB - command on page 5 of the remote to increase or decrease the output level of the subwoofer.
- Press the CENTER + or CENTER - command on page 5 of the remote to increase or decrease the output level of the center channel speaker.
- Press the SURR R + or SURR R - command on page 5 of the remote to increase or decrease the output level of the right surround speaker.
- Press the SURR L + or SURR L - command on page 5 of the remote to increase or decrease the output level of the left surround speaker.

Test Tone

To make adjustments more accurate, the RSDX-02e has a built-in pink noise test tone. Playing this calibrated test tone through each speaker while making the adjustments to match the speaker levels as closely as possible. Alternatively, you can use an SPL meter, held in one place at the listening position to measure the output of each speaker while playing the test tones.

To turn on the test tone, press the TEST button on Page 5 of the remote. Press the button again to turn off the test tone.

NOTE: Speaker level and test tone adjustments are also available from the Choice Menu system. These level settings are memorized independently for each source input.

DSP Effect LEVEL (EFFECT) **P5-F**

This adjustment changes the intensity of the reverberation effects when using one of the DSP surround modes for 2-channel input signals. Use the CONTROL ◀/▶ buttons to increase or decrease the intensity of the effect:

The range of settings is from 1 to 5 with 1 being the least intense effect and 5 being the highest intensity. 3 is the standard setting.

NOTE: This setting can only be made while one of the DSP surround modes is active. This setting is memorized independently for each source input.

Subwoofer Audio Position (AUDIO POS) **P2-H P1-D**

Once the subwoofer level is set for multichannel movie soundtracks, some listeners feel that the subwoofer is too loud for stereo music sources. Generally, this is an indication that the subwoofer level is set too high in the first place. However, the RSDX-02e provides a feature, called Audio Position, that will automatically reduce the subwoofer level whenever the surround mode is set to 2-ch stereo. Use the CONTROL ◀/▶ buttons to increase or decrease the Audio Position setting:

The range of settings is from 0dB to -6dB. A setting of 0 is the normal setting, with the subwoofer at the same level for all surround modes. A setting of -6 reduces the level of subwoofer by 6dB in stereo surround mode.

NOTE: This setting can only be made while one of the DSP surround modes is active.

CHOICE MENU SYSTEM

The Choice Menu system provides a number of additional setup and configuration options. The choice menus are available at any time except when the AM/FM source is selected. Most of the adjustments in the Choice Menus are memorized independently for each source input.

There are five Choice Menus:

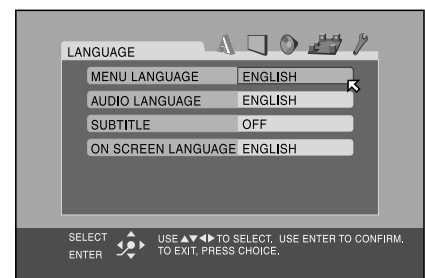
1. **LANGUAGE:** default options for menus, DVD subtitles, etc.
2. **PICTURE:** video options
3. **AUDIO:** audio options
4. **SPK. SETTING:** speaker configuration options
5. **OTHERS:** miscellaneous settings

Using the Choice Menus

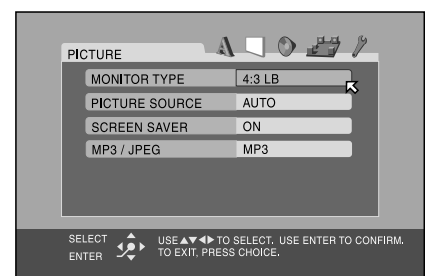
P1-E P1-D

The following procedure can only be done from the remote control.

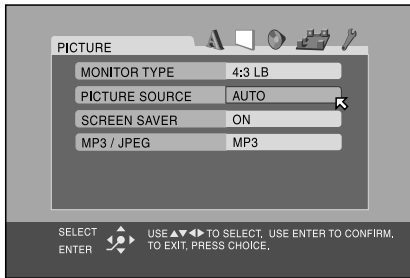
1. Select the source input you wish to adjust.
2. Press the CHOICE button on Page 1 of the remote. The LANGUAGE Choice Menu appears on the TV.



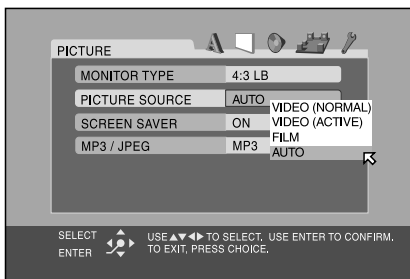
3. Press the CURSOR ◀/▶ buttons in the remote control to select the desired Choice menu. Each button press changes to the next menu. In this example, the PICTURE menu is displayed.



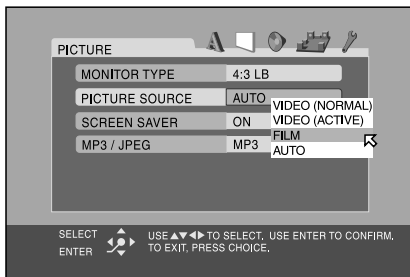
- Press the CURSOR ▲/▼ buttons to select the item you wish to adjust on the menu with the moving arrow. In this example, the PICTURE SOURCE item is selected.



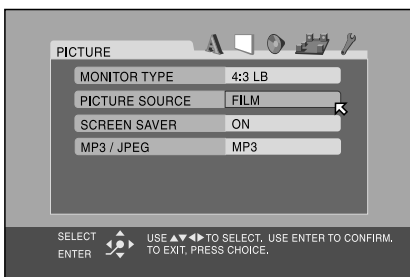
- Press the OK button and a pop-up window appears with the available settings for the item.



- Press the CURSOR ▲/▼ buttons to select the desired setting from the pop-up window. In this example, the FILM setting is highlighted.



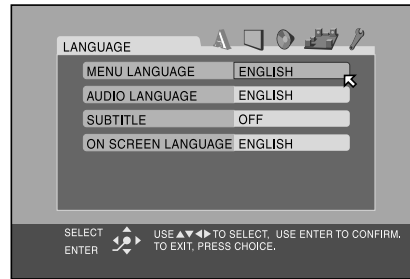
- Press the OK button to confirm the new setting.



- Repeat steps 3 through 7 to make additional settings or press the CHOICE button again to exit the menu system and return to normal operation.

The following sections describe the settings on each of the Choice Menus.

Language Menu



There are four items on the Language Menu which determine default languages for DVDs and on-screen menus.

Menu Language

Select a language as the preferred language for DVD menus when it is available on the disc.

Audio Language

Select a language as the default audio language for DVD soundtracks when it is available on the disc. You can still select a different language when playing a specific disc.

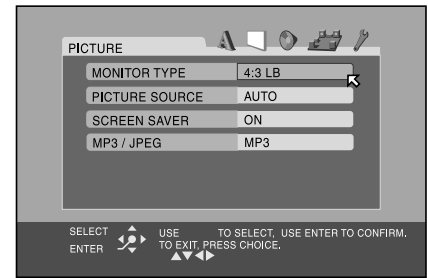
Subtitle

Select a language as the default subtitle language for DVDs when it is available on the disc. You can also select OFF so that DVDs are played without subtitles as the default. You can still select a different language when playing a specific disc.

On Screen Language

Select the language displayed in the Choice Menus and other on-screen status screens displayed by the RSDX-02e.

Picture Menu



There are four items on the Picture Menu which set various video options for DVD playback.

Monitor Type

There are two types of TVs: standard 4:3 aspect ratio and new wide-screen 16:9 aspect ratio monitors. Use this preference item to configure the video output to match the aspect ratio of your TV.

With a standard aspect ratio TV, you also need to tell the RSDX-02e how to adjust wide-screen video images to fit.

16:9 NORMAL (Wide Screen Stretch)



Select this option for a wide-screen TV that always displays a wide-screen image regardless of the aspect ratio of the incoming video signal. The RSDX-02e automatically adjusts the aspect ratio to match the wide-screen TV. If you play a normal 4:3 aspect program in this mode, the RSDX-02e stretches the picture to fill the wide-screen.

16:9 AUTO (Wide Screen)

Select this option for a wide-screen TV that automatically senses and adjusts the aspect ratio. All stretch modes are handled by the TV. 4:3 aspect ratio programs may be displayed with black bars on the sides, depending on the setting of the TV's stretch mode.

4:3 LB (Letter Box)



Select this option for a standard aspect ratio TV. 4:3 aspect ratio programs fill the screen. Wide-screen video images are displayed full-width with black letterbox masks inserted top and bottom.

4:3 PS (Pan/Scan)



Select this option for a standard aspect ratio TV. 4:3 aspect ratio programs fill the screen. Wide-screen video images enlarged to fill the screen vertically, cutting off portions of the left and right sides.

Picture Source

This setting optimizes the picture for film or video source material.

VIDEO (Normal): Optimized for video source material without rapid motion.

VIDEO (Action): Optimized for video source material with rapid motion.

FILM: Optimized for film source images.

AUTO: Automatically recognizes film or video source material and adjusts the picture accordingly. This is the default mode and provides the best overall performance for the widest range of DVD material.

Screen Saver

TV Monitors can be easily damaged if a static image is displayed for a long time. The Screen Saver feature automatically darkens the screen when a still image (such as a DVD menu) is displayed for five minutes.

ON: Activates the automatic screen saver function.

OFF: Disables the screen saver function.

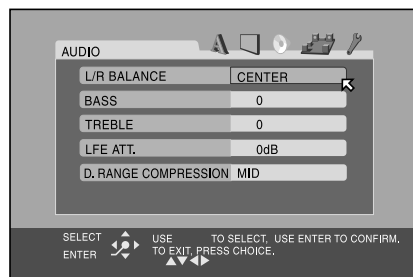
MP3/JPEG

Some discs contain both MP3 audio and JPEG images. This setting determines which of the two is played.

MP3: Select this option to play MP3 files.

JPEG: Select this option to play JPEG files.

Audio Menu



There are five items on the Audio Menu to tailor the audio performance of the system. These adjustments can also be made from the front panel and/or remote control as described in the Comprehensive Setup and Sound Settings sections of the manual.

L/R Balance

The BAL item allows you to adjust the left/right balance of the front speakers with a range of L -21 to Center and Center to R -21.

- **CENTER:** The standard setting with the sound balanced equally between the two front speakers.
- **L (-):** Settings indicated by an L followed by a negative number indicate that the volume of the left speaker is reduced and the sound shifted towards the right.
- **R (-):** Settings indicated by an R followed by a negative number indicate that the volume of the right speaker is reduced and the sound shifted towards the left.

Bass

Adjust the low frequency response of the system over a range of -10 to +10. A setting of 0 is flat response with no cut or boost.

Treble

Adjust the high frequency response of the system over a range of -10 to +10. A setting of 0 is flat response with no cut or boost.

LFE Attenuation

This setting provides an option to reduce the level of the Dolby Digital and DTS Low Frequency Effects (LFE) channel from its normal setting if you hear bass distortion.

- **0dB:** The normal setting, reproduces the LFE channel at its full level.
- **-10dB:** Reduces the level of the LFE channel by 10 decibels.

NOTE: The LFE attenuation setting has no effect with any input signal other than Dolby Digital or DTS.

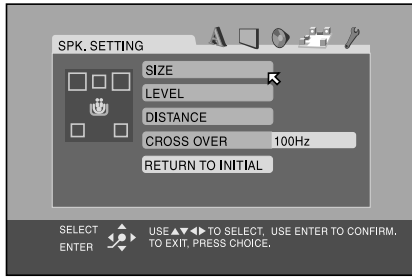
Dynamic Range Compression

Dolby Digital recordings are capable of wide dynamic range (the difference between the softest and loudest sounds). In some cases, this may tax amplifiers and/or speakers. In other cases, you may want to reduce the dynamic range when listening at low volume levels.

- **MID:** slightly reduced dynamic range, roughly comparable to the signal from a compact disc
- **MAX:** more heavily reduced dynamic range, but still comparable to the signal from a typical VHS Hi-Fi recording.
- **OFF:** full dynamic range; no compression

NOTE: The Dynamic Range Compression feature ONLY affects Dolby Digital signals.

Speaker Setting Menu



There are four items on the Speaker Setup Menu to configure the RSDX-02e for proper operation with your system. These adjustments can also be made from the front panel and/or remote control as described in the Sound Settings section of the manual.

Size

Select this item for a sub-menu that configures how many and what size speakers are in your system.

FRONT SPEAKER CENTER SPEAKER SURROUND SPEAKER

For each type of speaker, choose one of three options:

- **LARGE:** Select if the speaker(s) for this item are capable of reproducing deep bass.
- **SMALL:** Select to redirect the deep bass from the speaker(s) for this item to a powered subwoofer or to large speakers in the system.
- **NONE:** Select if you do not have speaker(s) for this item in the system. For example, if you do not have surround speakers, select NONE for the SURROUND SPEAKER item.

NOTE: The NONE option is not available for the front speakers. If you have selected NONE for the subwoofer, the front speakers are automatically set to LARGE.

SUBWOOFER

Select one of two settings:

- **USE:** Select this setting if you have connected a powered subwoofer.
- **NONE:** Select this setting if your system does not have a powered subwoofer.

RETURN

When the adjustments are complete, select RETURN to leave the sub-menu and return to the Speaker Settings Menu.

NOTE: In the vast majority of systems with a powered subwoofer, all speakers should be set to SMALL so that their deep bass is redirected to the subwoofer. This will usually result in better overall bass performance and a system that will play louder and cleaner, even when the front speakers are physically large.

Level

Select this item for a sub-menu that allows matching the output level of all of the speakers in the system for proper surround sound performance.

CENTER SPEAKER SURROUND LEFT SPEAKER SURROUND RIGHT SPEAKER SUB WOOFER

Adjust each of these items to match the volume from that speaker as closely as possible to the other speakers.

TEST TONE

Select this item to turn on or off a special pink noise test tone that makes adjusting the levels easier and more accurate.

RETURN

When the adjustments are complete, select RETURN to leave the sub-menu and return to the Speaker Settings Menu.

NOTE: When NONE has been selected for a type of speaker, the adjustment cannot be made and the test tone will not be played by that speaker. Level settings for Center and Surround Speakers can only be made when a multichannel surround sound mode is active.

Distance

Select this item for a sub-menu to set the digital delay for each speaker in the system so that sounds arrive at your ear from all speakers simultaneously. The settings are made by selecting the distance (in meters or feet) from

your listening location to each of your speakers. The RSDX-02e then calculates delay times automatically.

FRONT SPEAKER CENTER SPEAKER SURROUND SPEAKER

Select the distance from each of these speakers to your listening position. The range is from 0.3m/1ft to 9.0m/30ft.

TEST TONE

Select this item to turn on or off the test tone.

RETURN

When the adjustments are complete, select RETURN to leave the sub-menu and return to the Speaker Settings Menu.

NOTE: When NONE has been selected for a type of speaker, the adjustment cannot be made and the test tone will not be played by that speaker.

Crossover

The deep bass intended for any speaker configured as SMALL is redirected to the powered subwoofer or to LARGE speakers based on the settings of the digital crossover in the RSDX-02e. This item selects the crossover frequency. Bass below the crossover frequency is redirected; sounds above the crossover frequency are sent to the original speaker. Select one of three crossover frequencies:

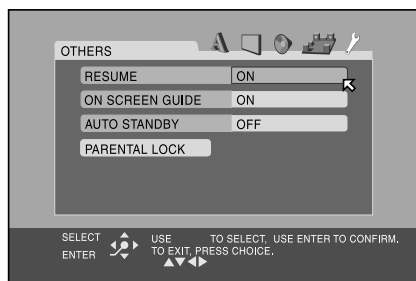
- **80Hz:** Select for an 80Hz crossover. Recommended when all of the speakers have woofer sizes of 6 inches or larger.
- **100Hz:** Select for an 100Hz crossover. Recommended when the smallest speakers have woofer sizes of 5 inches.
- **120Hz:** Select for a 120Hz crossover. Recommended when the smallest speakers have woofer sizes of 4 inches or smaller.

NOTE: If you have previously configured all of your speakers as LARGE, the crossover frequency item will not appear.

Return to Initial

Select this item to reset all speaker settings to the factory defaults.

Others Menu



There are miscellaneous convenience items and extra features on the Other Menu

Resume

The Resume feature stores the current location when DVD playback is stopped; allowing playback to be resumed from that point.

- **ON:** Select to enable the Resume feature.
- **OFF:** Select to disable the Resume feature. Playback will always resume at the beginning of the disc.

On-Screen Guide

The built-in DVD player can display icons and status indicators for several features on the TV set. These icons alert you to the availability of multi-view angles, multilingual subtitles, and multilingual soundtracks on a DVD. Status indicators show the play mode, rapid play speed, etc. Generally, these icons are useful; however, you may wish to turn them off when recording a DVD. The ability to display the On-Screen Status Bar at any time is not affected by this selection.

- **ON:** Select to enable the Guide feature.
- **OFF:** Select to disable the Guide feature.

Auto Standby

The RSDX-02e can automatically turn off when DVD playback has finished and no additional commands are received for a specified time. This prevents a DVD from returning to a static menu screen if it is left unattended. This feature is only available when the DVD source input is active. There are three settings:

- **60:** Auto Standby turns off the unit after 60 minutes of inactivity.
- **30:** Auto Standby turns off the unit after 40 minutes of inactivity.
- **OFF:** Disables the Auto Standby feature.

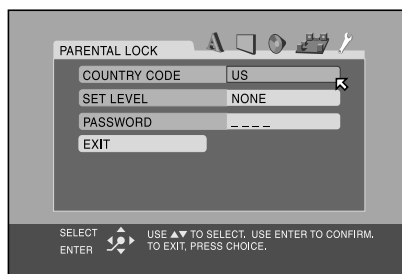
NOTE: If Auto Standby and the Sleep timer are both set, the unit turns off at the earlier of the two intervals.

Parental Lock

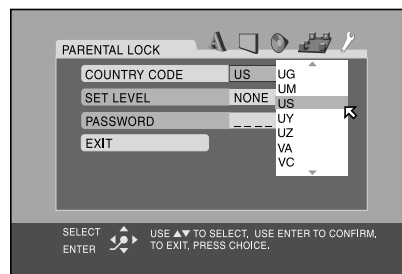
The RSDX-02e has a Parental Lock feature to prevent children from watching inappropriate DVD Video discs. The feature relies on ratings systems (specific to each country) that set a rating level for discs starting from material suitable for viewing by children and increasing as the subject matter becomes more inappropriate. The Parental Lock feature sets the restriction anywhere from Level 1 to Level 8. A disc with a rating higher than the specified level requires entry of a password for playback. Thus, if you specify a Level 5 restriction, any discs rated Level 6 or higher require a password.

Setting the Parental Lock

1. With playback stopped, select the PARENTAL LOCK item on the Others Menu. The Parental Lock sub-menu appears.

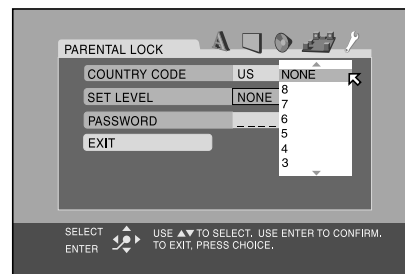


2. Select the COUNTRY CODE field on sub-menu and press the OK button. A pop-up window appears with the list of country codes (see Figure 9 at the front of this manual for a list of codes).



3. Press the CURSOR ▲/▼ buttons to scroll through the list of country codes and highlight a selection.

4. Press OK. The highlight cursor moves to the SET LEVEL field.



5. Press the CURSOR ▲/▼ buttons to scroll through the list of setting levels and make a selection. The available options are:

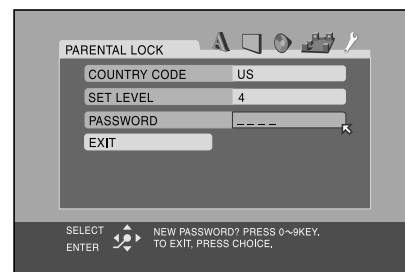
NONE: no restriction

LEVEL 1: the most restrictive

LEVELS 2-7: progressively less restrictive

LEVEL 8: the least restrictive

6. Press OK. The highlight cursor moves to the PASSWORD field.



7. Enter a 4-digit password using the NUMERIC (0-9) buttons on the remote. If you make a mistake, you can reenter a different password. Write down your password for safe keeping!

8. Press OK. The highlight cursor moves to the EXIT field. Press ENTER again to exit the Parental Lock screen and return to the Others Menu.

To Change Parental Lock Settings

Changing the Parental Lock settings follows the same procedure, except that you must first enter your 4-digit password before making any changes on the Parental Lock sub-menu.

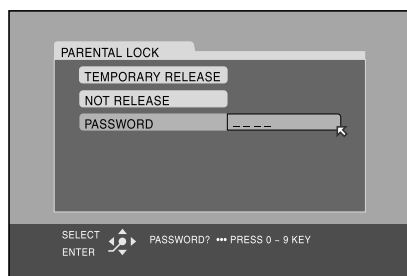
If you enter the wrong password, you cannot proceed. If you enter it wrong more than three times, the cursor jumps to EXIT field.

NOTE: If you forget your password, enter the master password "8888".

Playback with Parental Lock

P1-D P4-A

When you play a disc that has a rating less than or equal to your specified Level, playback proceeds normally. If you attempt to play a disc that is rated above your specified Level, the following display appears on the TV screen asking if you want to temporarily override the Parental Lock and play the disc:



1. To eject the disc, use the CURSOR ▲/▼ buttons on Page 1 of the remote to highlight the NOT RELEASE field, then press the OK button. Eject the disc.
2. To play the disc, use the CURSOR ▲/▼ buttons to highlight the TEMPORARY RELEASE field, then press the OK button.
3. Enter the 4-digit password using the NUMERIC buttons on Page 4 of the remote. If you enter the wrong password three times, playback is prohibited. If you enter the correct password, the parental lock is temporarily removed and playback begins.

Specifications

Amplifier

Output Power, Stereo Operation:

80 W per ch, min. RMS, 8 ohms, 40 Hz – 20 kHz with no more than 0.8% total harmonic distortion.

Output Power, Surround operation:

80 W per ch, min. RMS, 8 ohms at 1 kHz, with no more than 0.8% total harmonic distortion.

Audio

Audio Input Sensitivity/Impedance (1 kHz):

TV, TAPE/CDR, STB, VCR: 240 mV/47 kOhm

Audio Input (DIGITAL IN):

Coaxial: 0.5 V(p-p)/75 ohms

Optical: -21 dBm to -15 dBm (660 nm ±30 nm)

Digital formats:

Linear PCM, Dolby Digital, and DTS (with sampling frequency-32 kHz, 44.1 kHz, 48 kHz)

Signal-to-Noise Ratio ('66 IHF/'78 IHF):

TV, TAPE/CDR, STB, VCR: 87 dB/67 dB

Frequency Response:

TV, TAPE/CDR, STB, VCR: 20 Hz to 20 kHz (±1 dB)

Tone Control:

Bass (100 Hz): ±10 dB

Treble (10 kHz): ±10 dB

Video

Video Input Sensitivity/Impedance (1 kHz):

Composite video: 1 V(p-p)/75 ohm

S-Video (Y: luminance): 1 V(p-p)/75 ohm

S-Video (C: chrominance): 0.286 V(p-p)/75 ohm

RGB video: 0.7 V(p-p)/75 ohm

Video Output Level/Impedance (1 kHz):

Composite video: 1 V(p-p)/75 ohm

S-video (Y:luminance): 1 V(p-p)/75 ohm

S-video (C:chrominance): 0.286 V(p-p)/75 ohm

RGB video: 0.7 V(p-p)/75 ohm

Color System:

PAL

Horizontal Resolution:

500 lines or more

Signal-to-Noise Ratio (S/N):

63 dB

Synchronize:

Negative

FM tuner (IHF)

Tuning Range:

87.5 MHz to 108.0 MHz

AM tuner

Tuning Range:

522 kHz to 1629 kHz

General

Power Requirements:

AC 230 V, 50 Hz

Power Consumption:

180 W

2 W (in standby mode)

Dimensions (W x H x D):

435 mm x 118 mm x 415 mm

(17 3/16 in. x 4 5/8 in. x 16 3/8 in.)

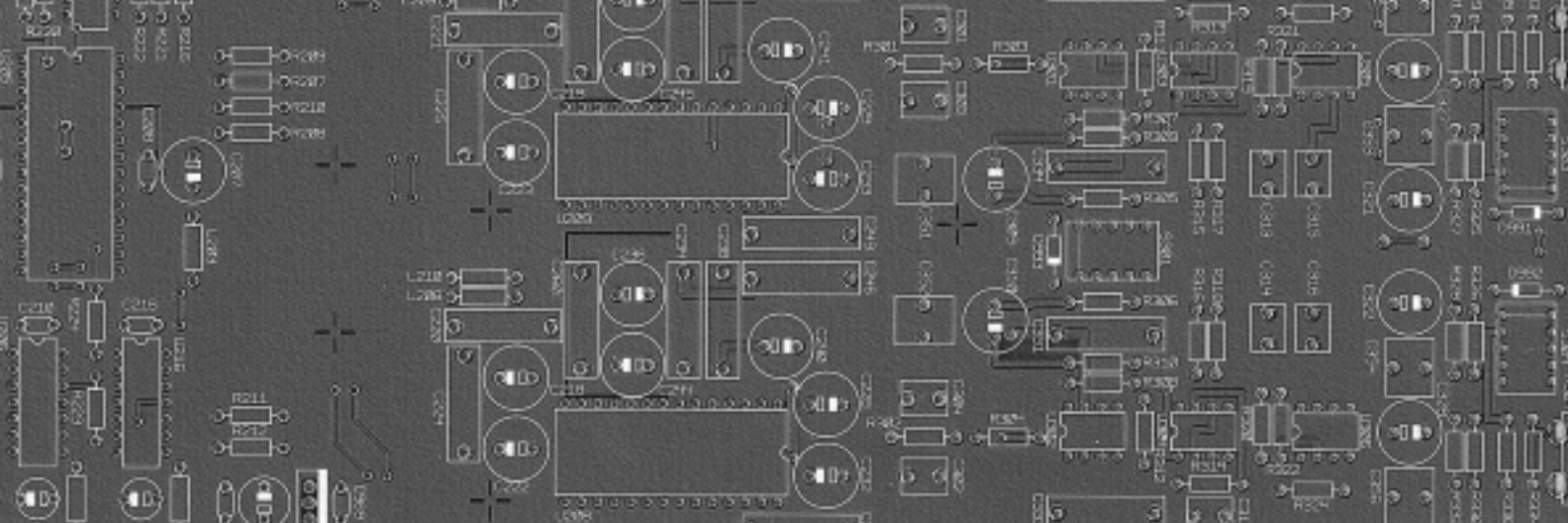
Weight:

9.7 kg (21.4 lbs)

All specifications are accurate at the time of printing.

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